

**APPENDIX A**  
**PHOTOGRAPHS**



WRC electro-fishing boat on the Cape Fear River, collecting striped bass. 16 February 2004



WRC electro-fishing boat at Lock and Dam #1, collecting American shad. 5 April 2004





Striped bass prior to tagging.  
16 February 2004



Holding pen used for recovery after tagging.  
2 March 2004



Sonic tag insertion on striped bass.  
2 March 2004



Sutured incision point.  
2 March 2004





External dart tag placement.  
2 March 2004



Dart tag.  
2 March 2004



Newly captured and recaptured striped bass.  
2 March 2004



External dart tag placement on recaptured striped bass.  
2 March 2004





American shad tagging sequence - #1.



American shad tagging sequence - #2.



American shad tagging sequence - #3.



American shad tagging sequence - #4.



American shad tagging sequence - #5.



Sonic tag types.





Public landing at Buckhorn Dam.  
22 June 2004



Take-out location at Riverside Sports Center in Fayetteville,  
NC. 24 June 2004

**APPENDIX B**

**FISH COLLECTION DATES, TECHNIQUES,  
AND EFFORT**

Appendix B. Fish collection dates, techniques, effort, and fish caught associated with USACE Fish Passage Study for 2004.

<b>Site<sup>a</sup></b>	<b>Date</b>	<b>Gear</b>	<b>Level of Effort</b>	<b>Catch</b>
CFR	13 February	Electrofishing	60 minutes	5 Striped bass
CFR	18 February	Electrofishing	31 minutes	3 Striped bass
AC	16 February	Electrofishing	15 minutes	10 Striped bass
AC	18 February	Electrofishing	25 minutes	6 Striped bass
AC	2 March	Electrofishing	21 minutes	5 Striped bass
HBN	13 February	Electrofishing	46 minutes	4 Striped bass
HBN	16 February	Electrofishing	14 minutes	3 Striped bass
HBN	20 February	Electrofishing	31 minutes	6 Striped bass
HBN	2 March	Electrofishing	21 minutes	5 Striped bass
TC	20 February	Electrofishing	30 minutes	2 Striped bass
LD1	17 March	Gill net	1 gill net, 0.5 hrs	2 American shad
LD1	24 March	Gill net	1 gill net, 2.0 hrs	2 American shad
LD1	30 March	Gill net	1 gill net, 6.5 hrs	26 American shad
LD1	5 April	Gill net	1 gill net, 2.5 hrs	14 American shad
LD1	5 April	Electrofishing	10 minutes	3 American shad
LD1	6 April	Gill net	1 gill net, 1.0 hrs	3 American shad

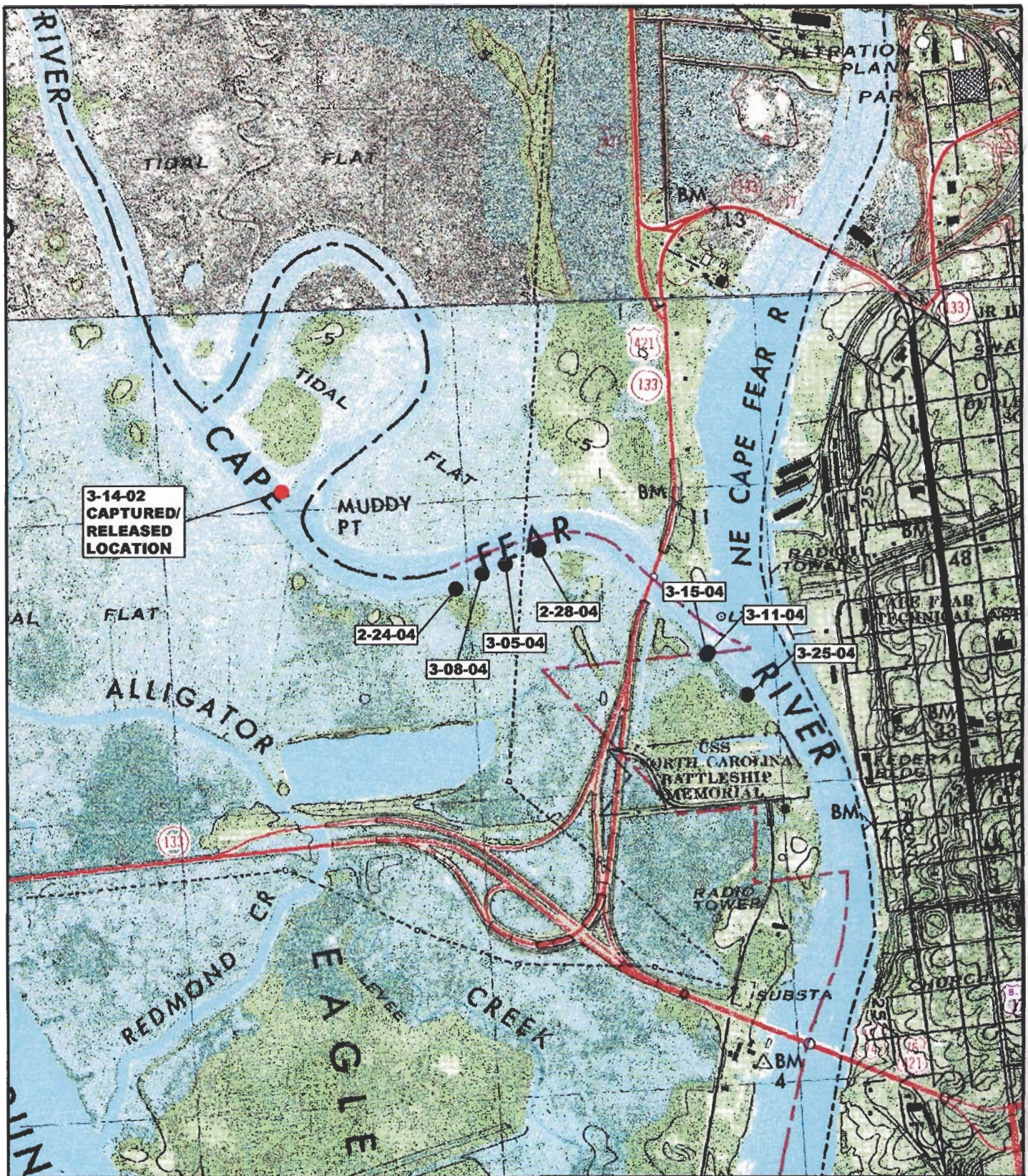
<sup>a</sup> Sites: HBN - Horseshoe Bend North  
TC - Toomer's Creek  
AC - Alligator Creek on Brunswick River south of Sturgeon Creek  
CFR - Cape Fear River near Wilmington Harbor  
LD1 - Downstream of Lock and Dam #1



## **APPENDIX C**

### **MAPS**





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-14-02
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5004

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 6/30/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5004-04

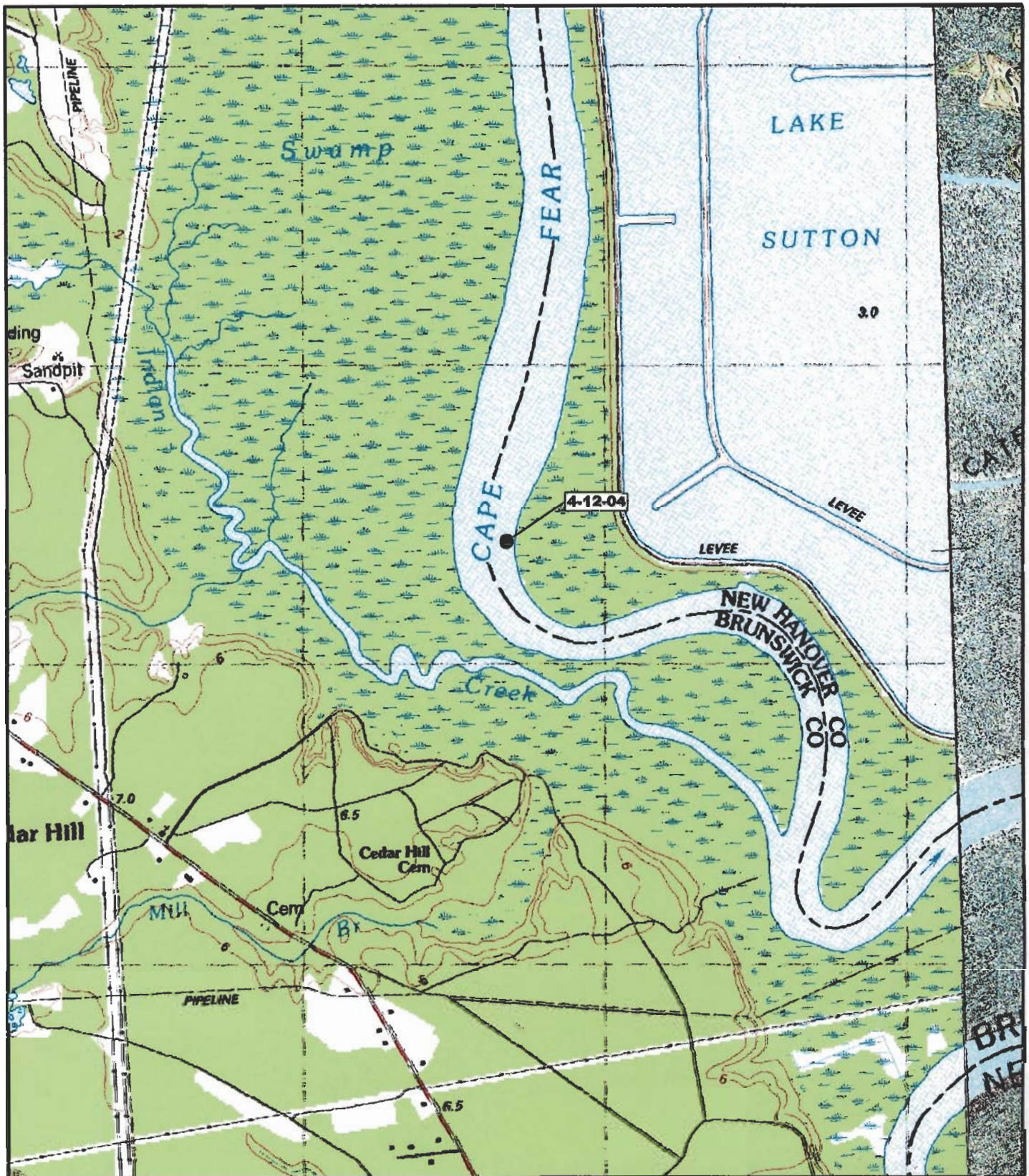


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 5





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-14-02
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5004

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 6/30/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5004-04

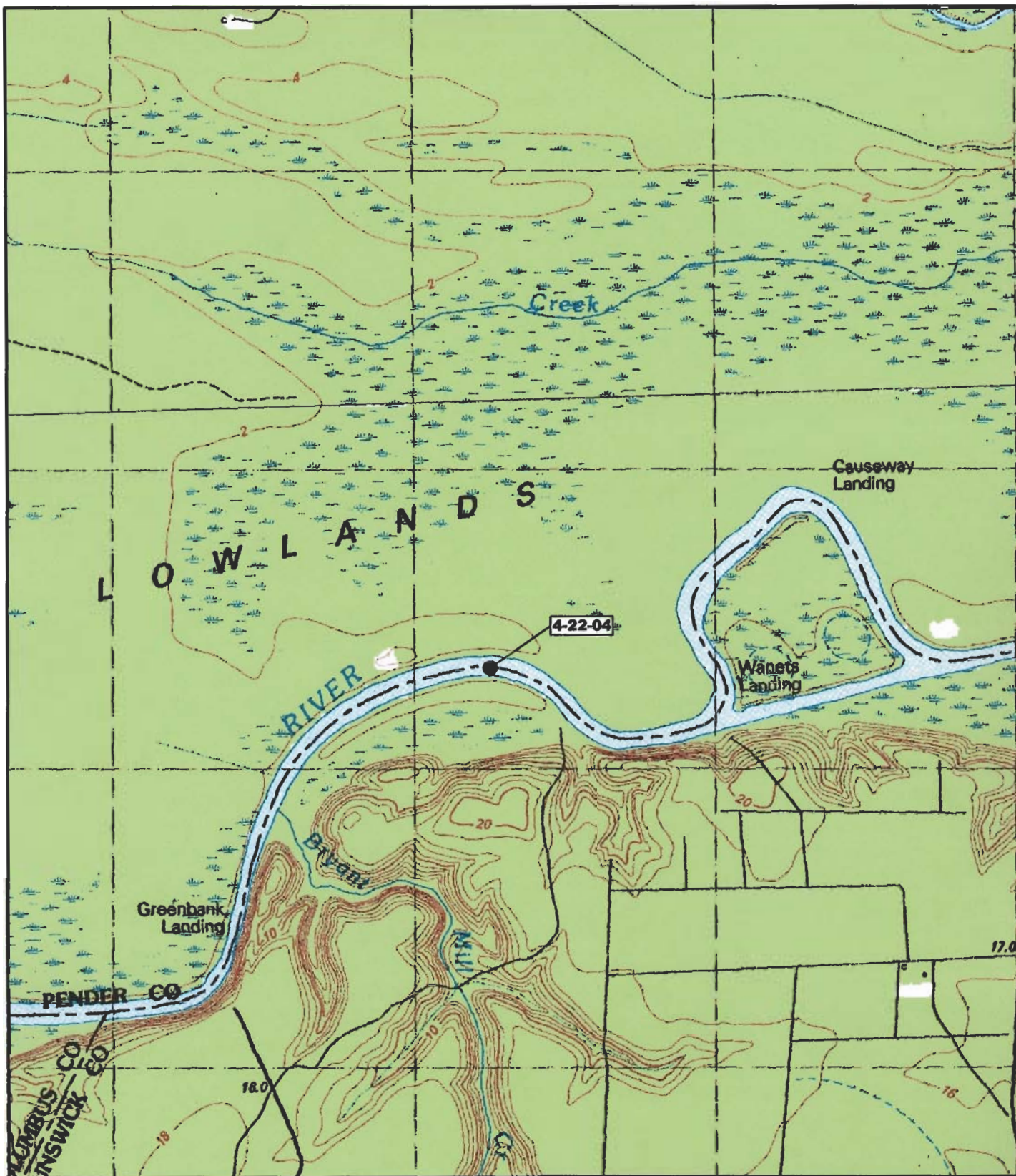


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8253  
FAX 910/592-9139

CP#1976.00

2 of 5





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-14-02
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5004

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5004-04

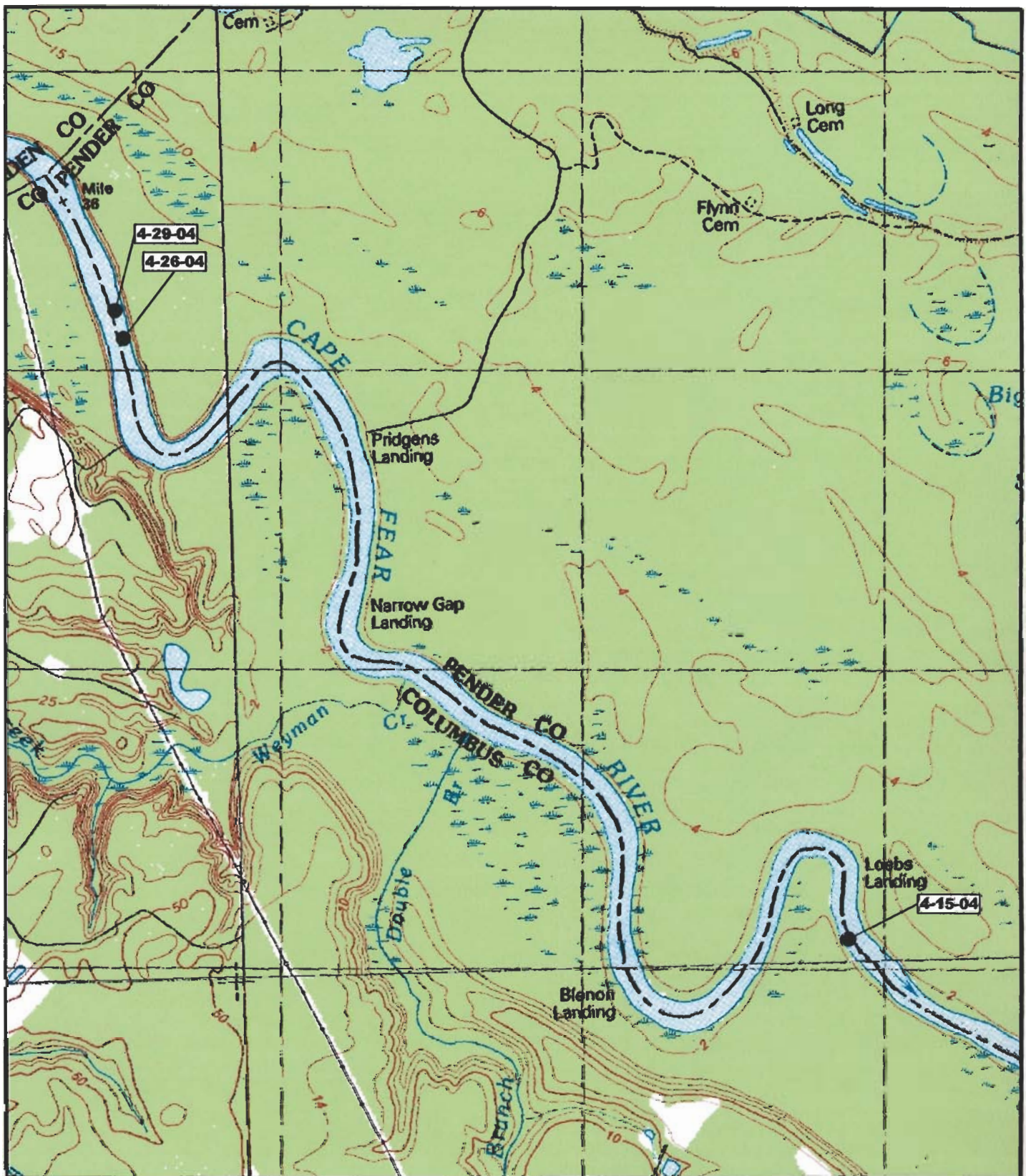


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9159

CP#1976.00

3 of 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-14-02**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5004**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/9/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5004-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 of 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-14-02**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5004**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5004-04

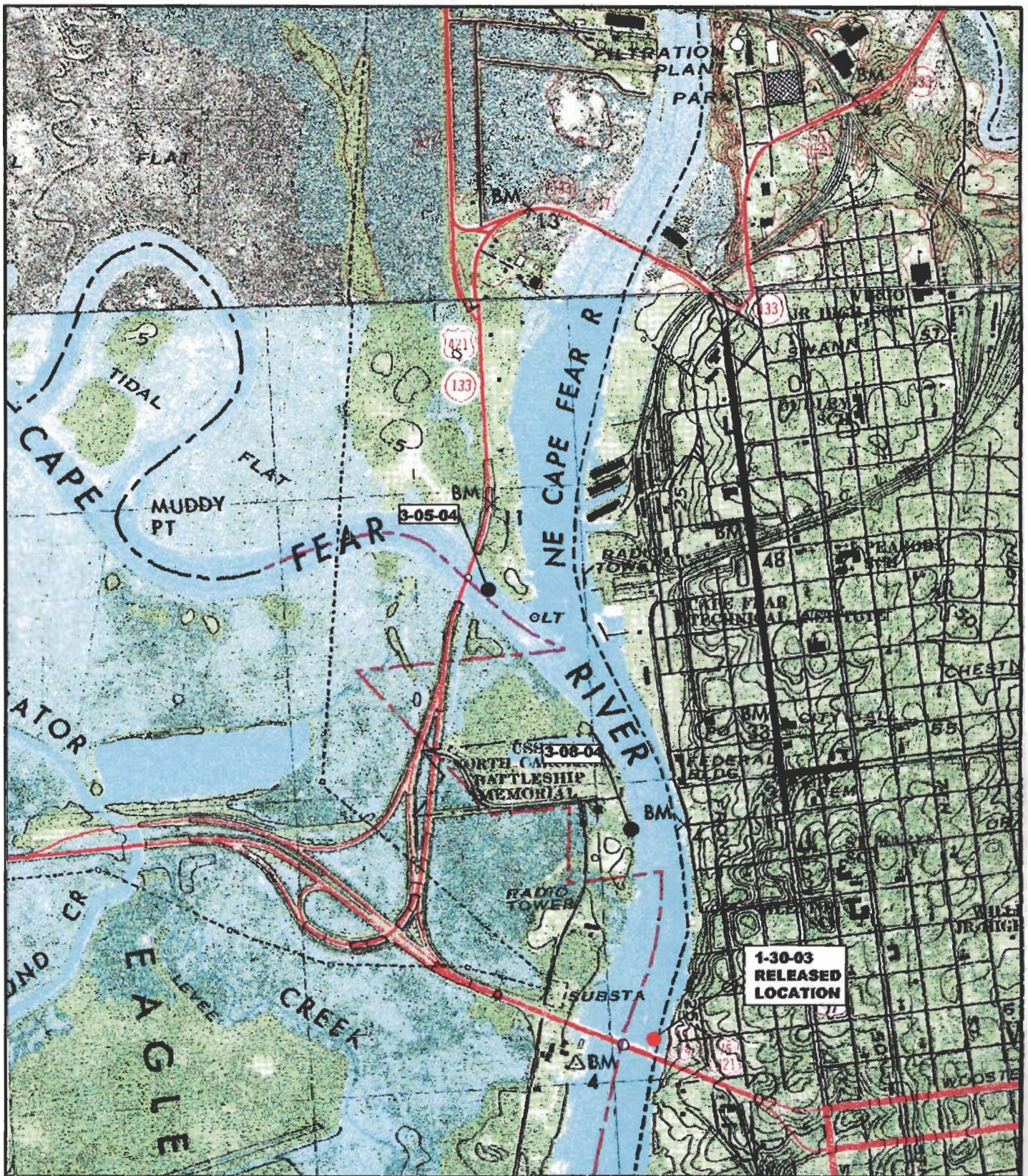


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 810/392-9253  
FAX 810/392-9159

CP#1976.00

5 of 5





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03
- SITE OF RELOCATED FISH

0 1500 3000  
  
 SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
 CZR5009

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/9/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5009-04



4708 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

1 of 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5009

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5009-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

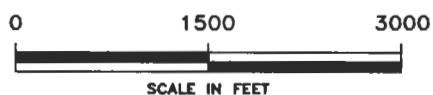
CP#1976.00

2 of 2



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5010

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5010-04

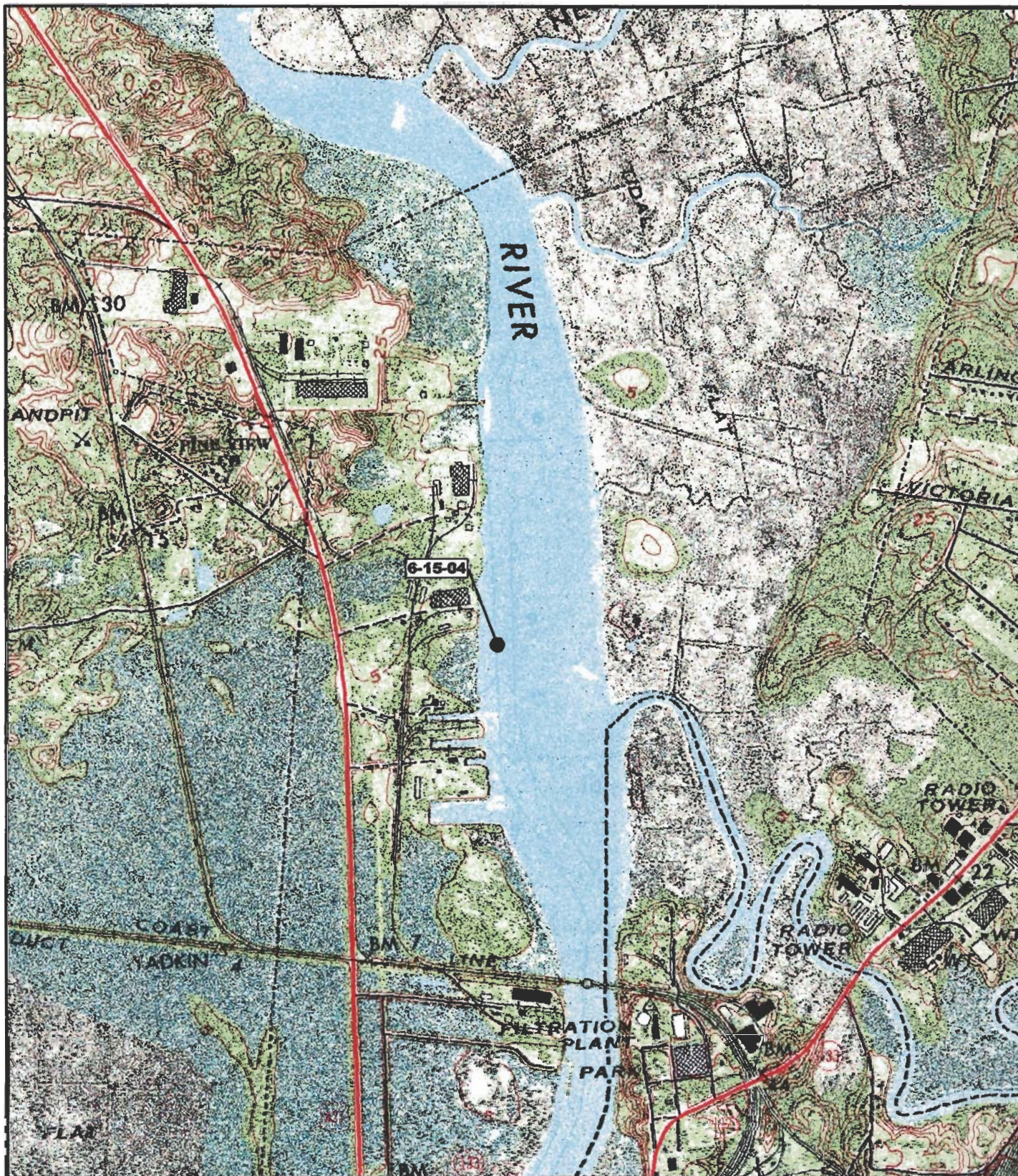


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5010**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 3/6/04

FILE: 6273010004

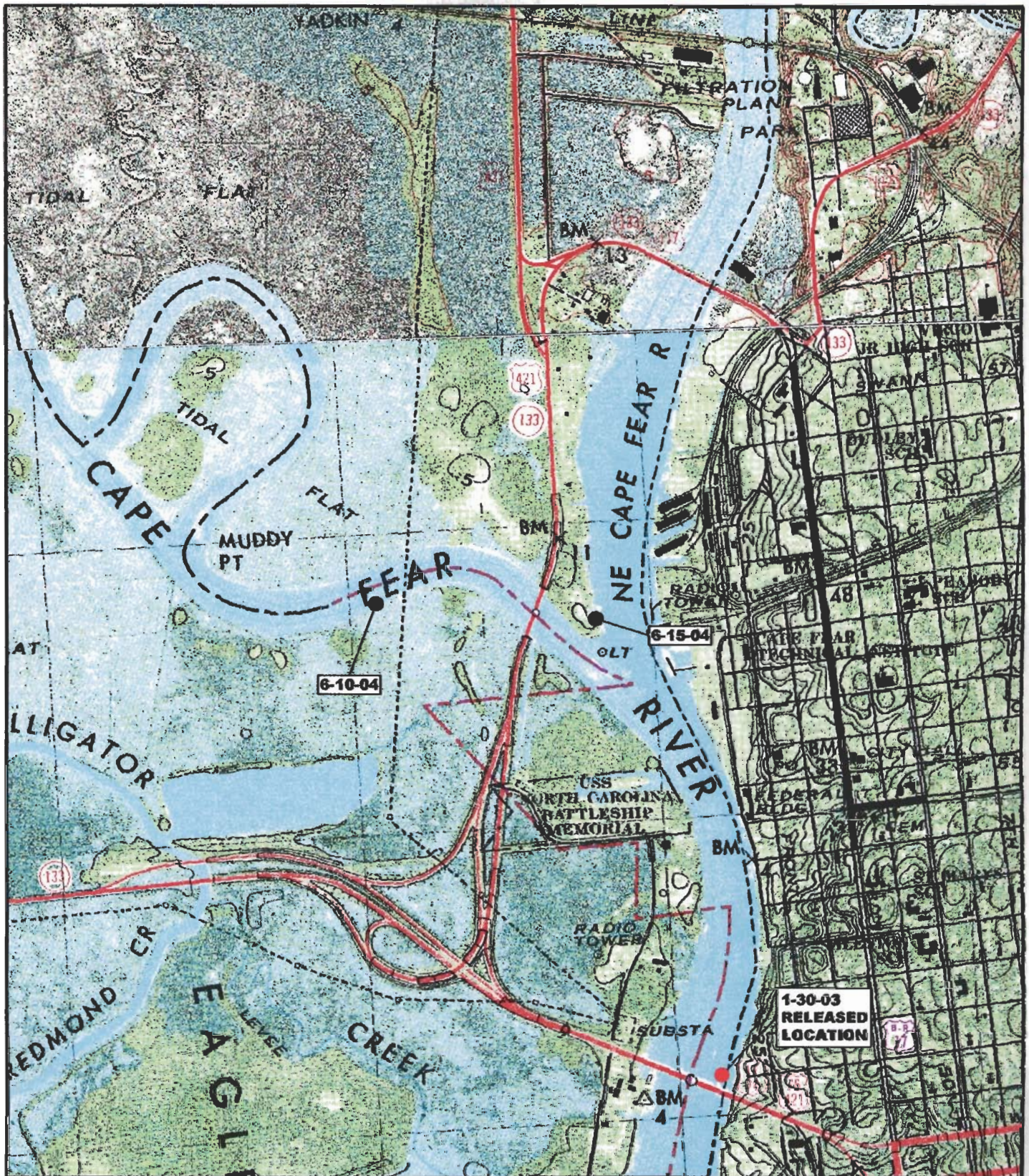


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#11370.50

2 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
 CZR5011

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: TLJ/TJB
DATE: 8/11/04		FILE: CZR5011-04

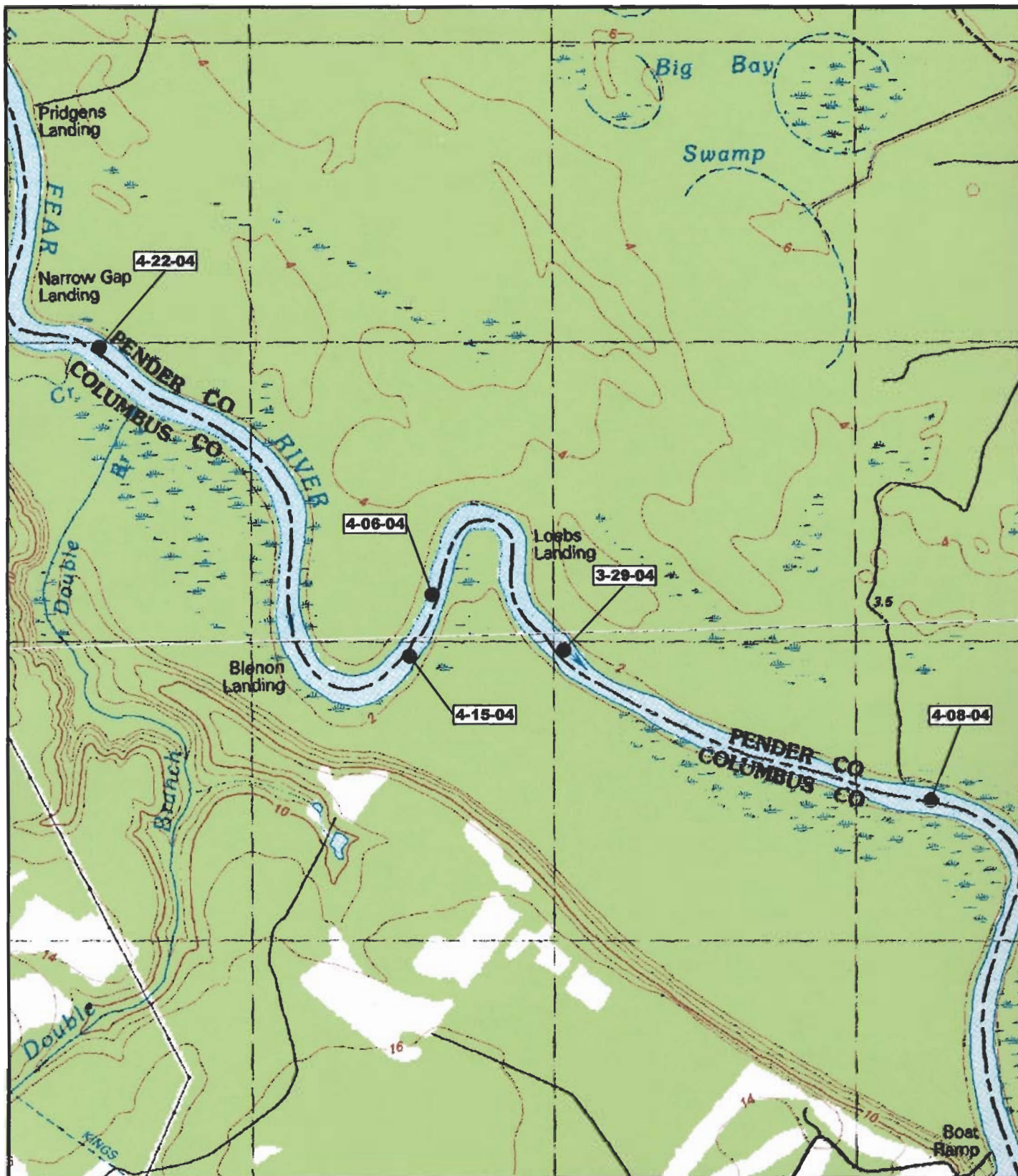


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-8253  
 FAX 910/392-9139

CP#1976.00

1 of 3





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
 CZR5011

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 6/30/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5011-04

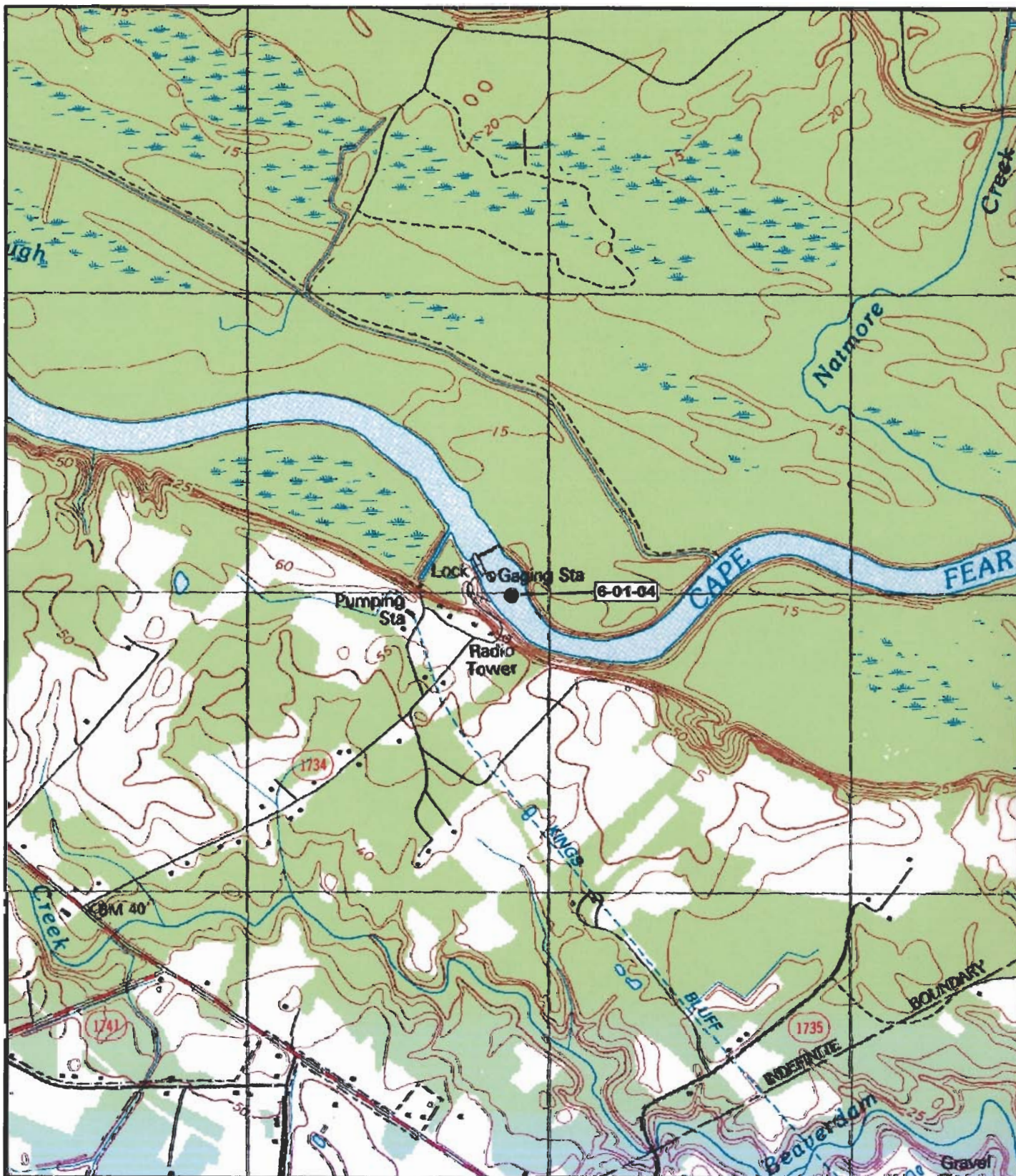


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

2 of 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 1-30-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5011**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 6/30/04

FILE: CZR5011-04

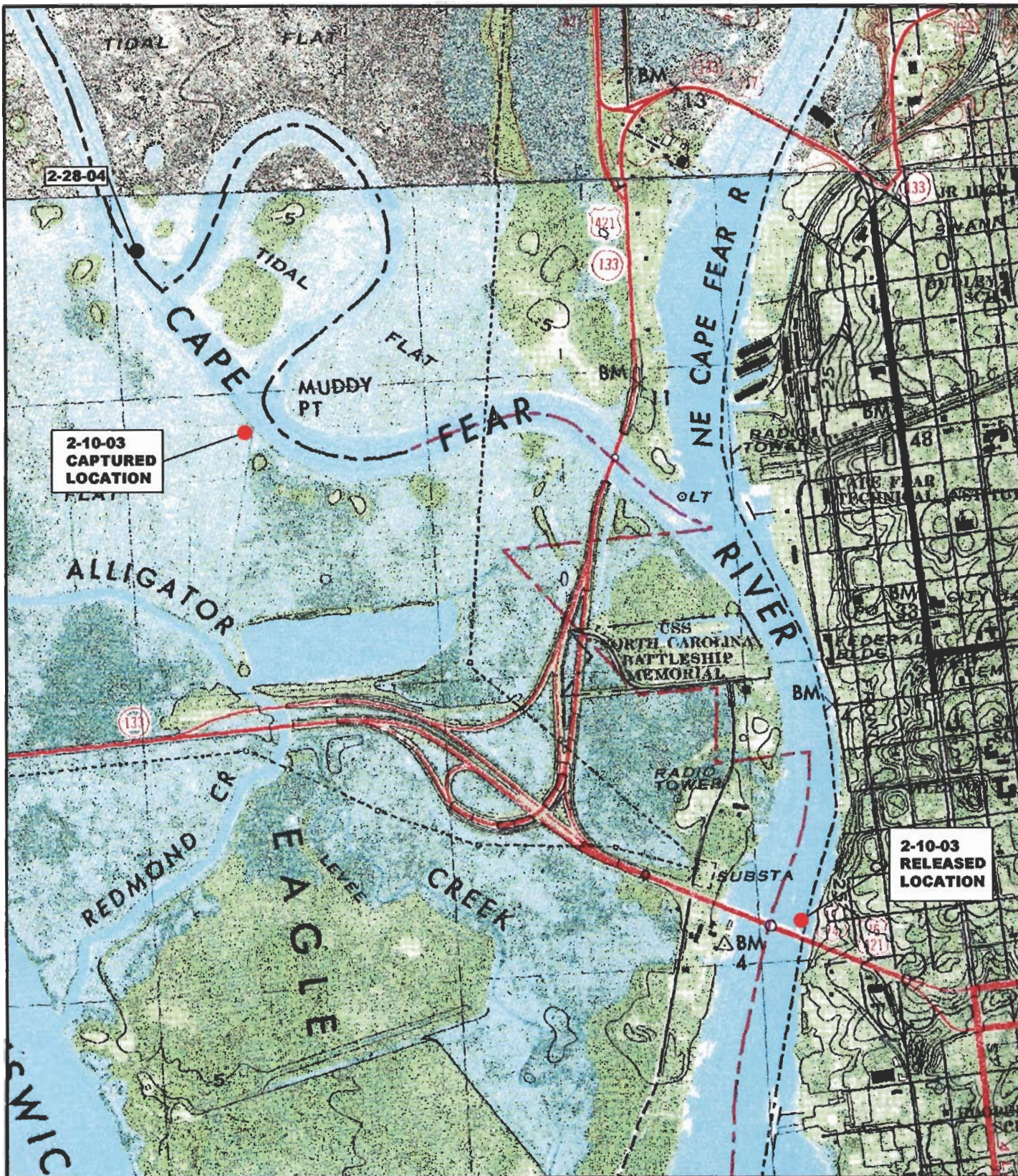


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 of 3





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-10-03
- SITE OF RELOCATED FISH

0 1500 3000  
 SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
 CZR5012

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5012-04

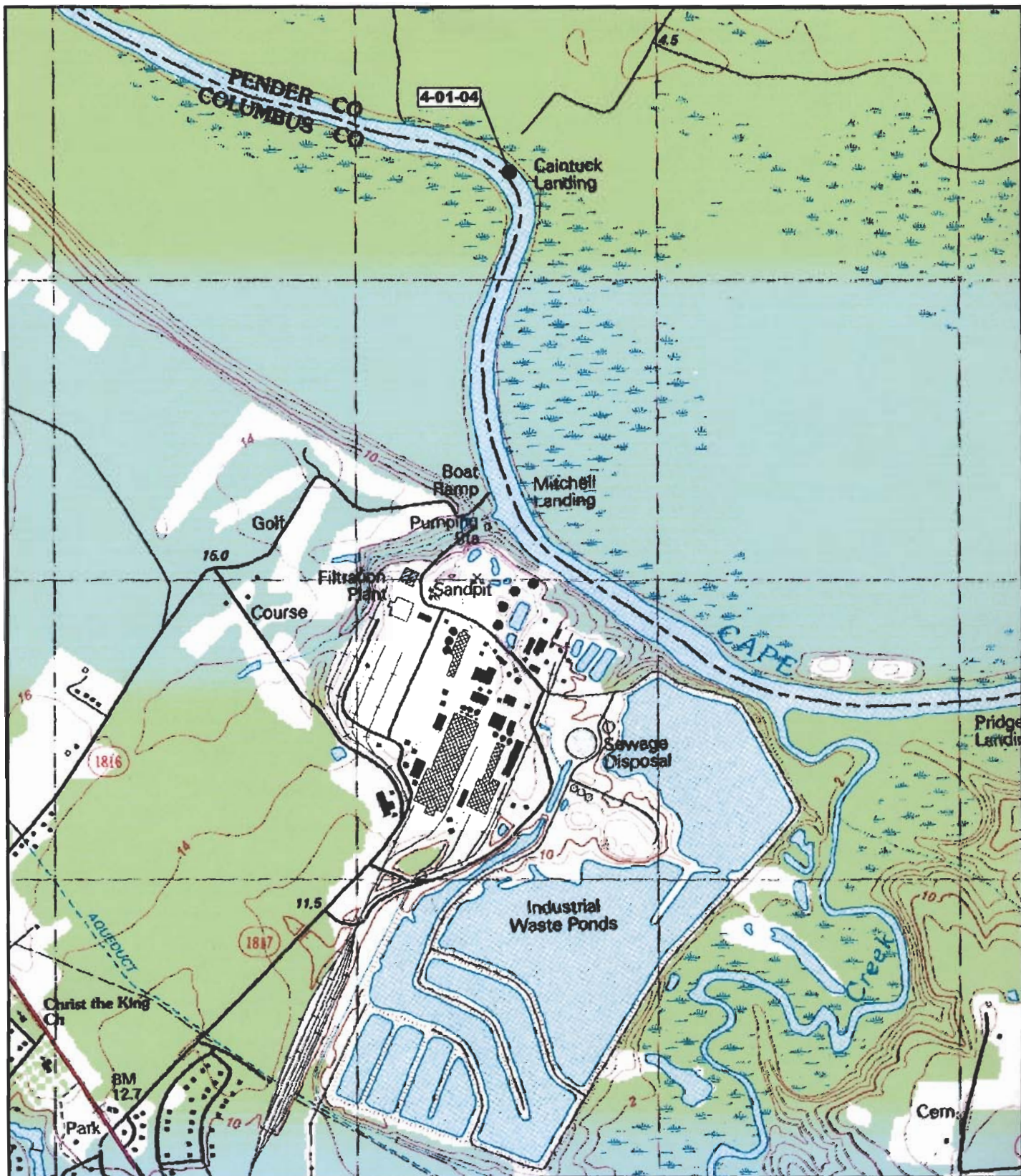


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-10-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5012**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5012-04

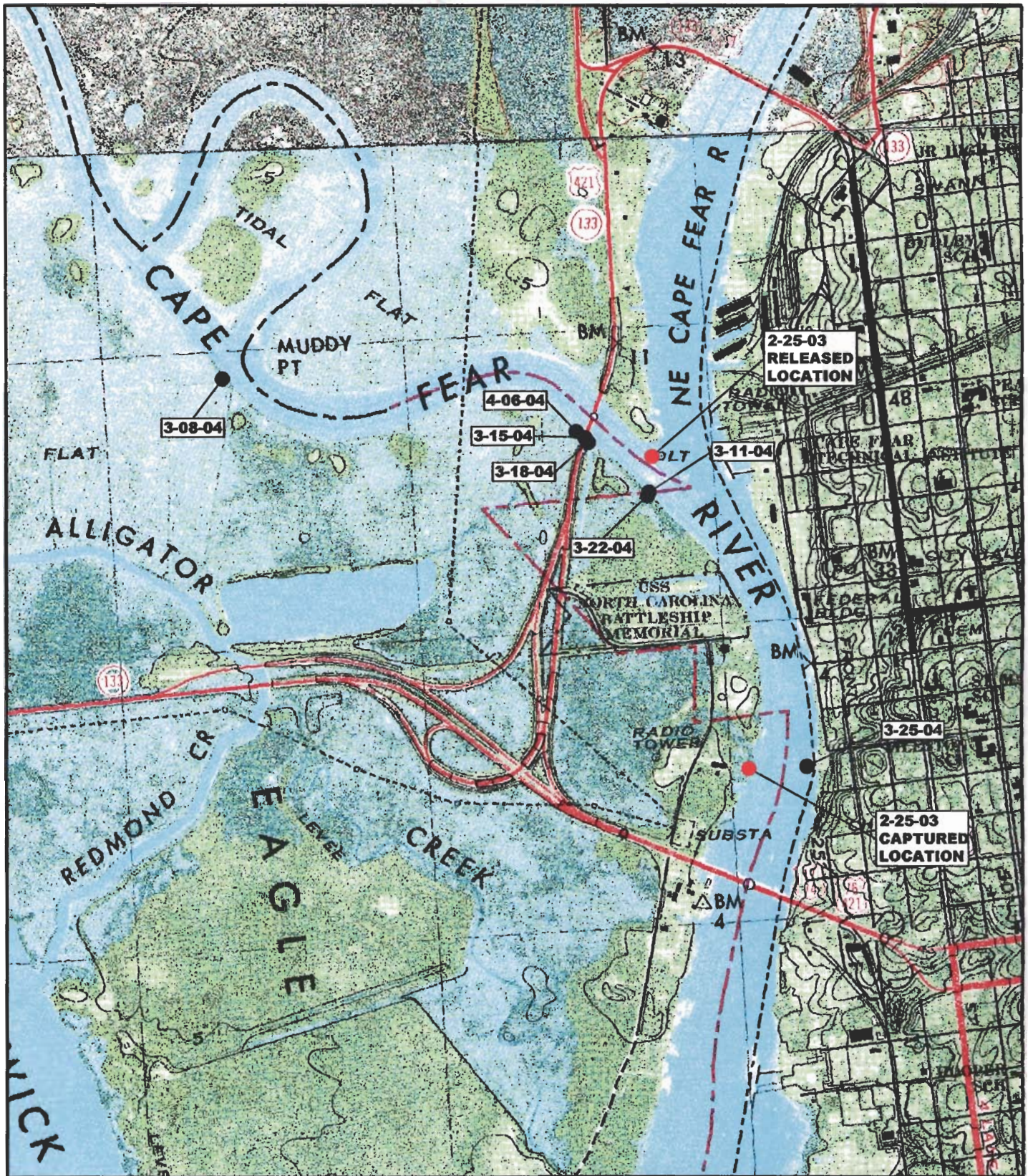


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9159

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5015

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5015-04

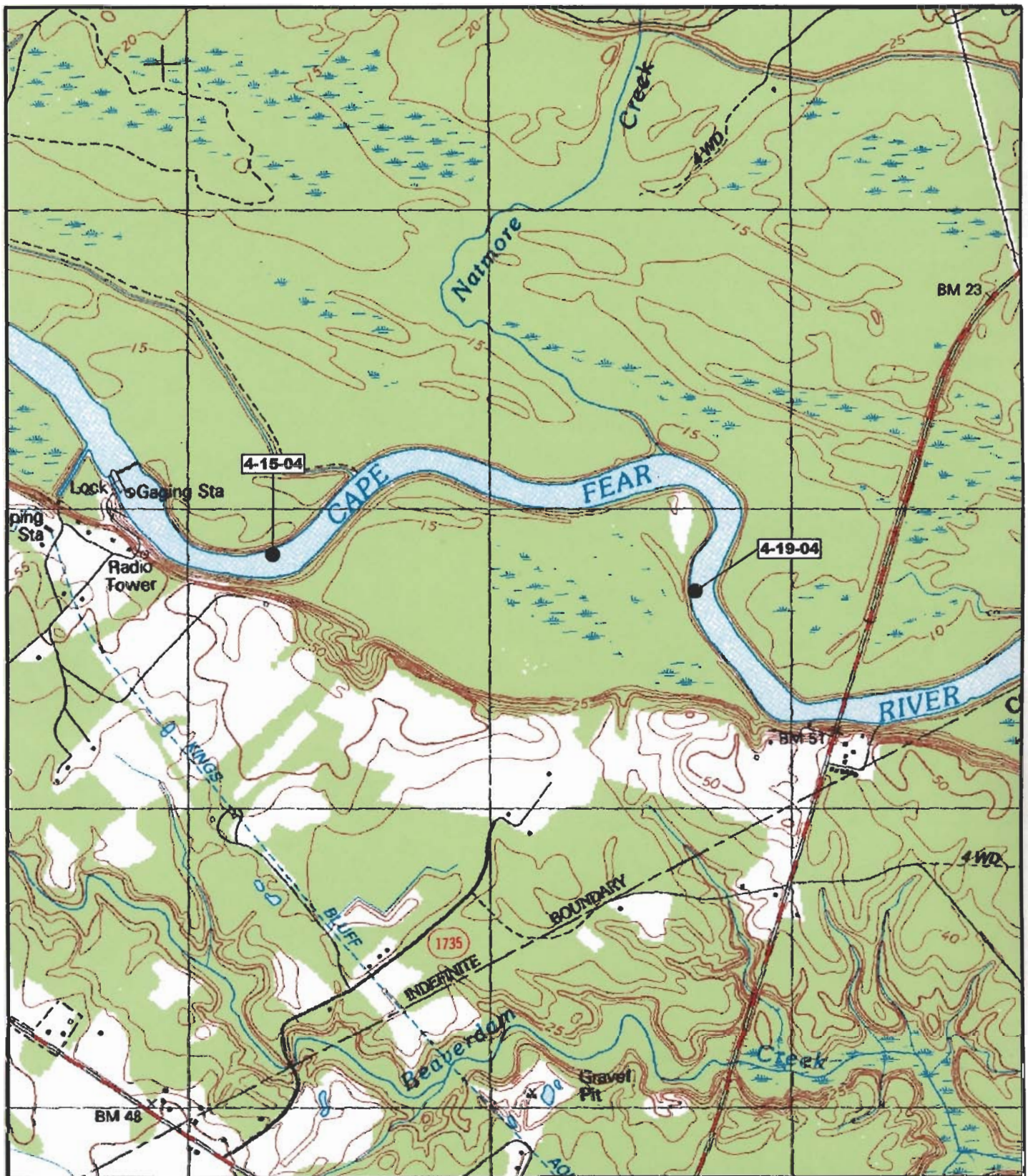


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03
- SITE OF RELOCATED FISH

0 1500 3000



SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5015

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/9/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5015-04

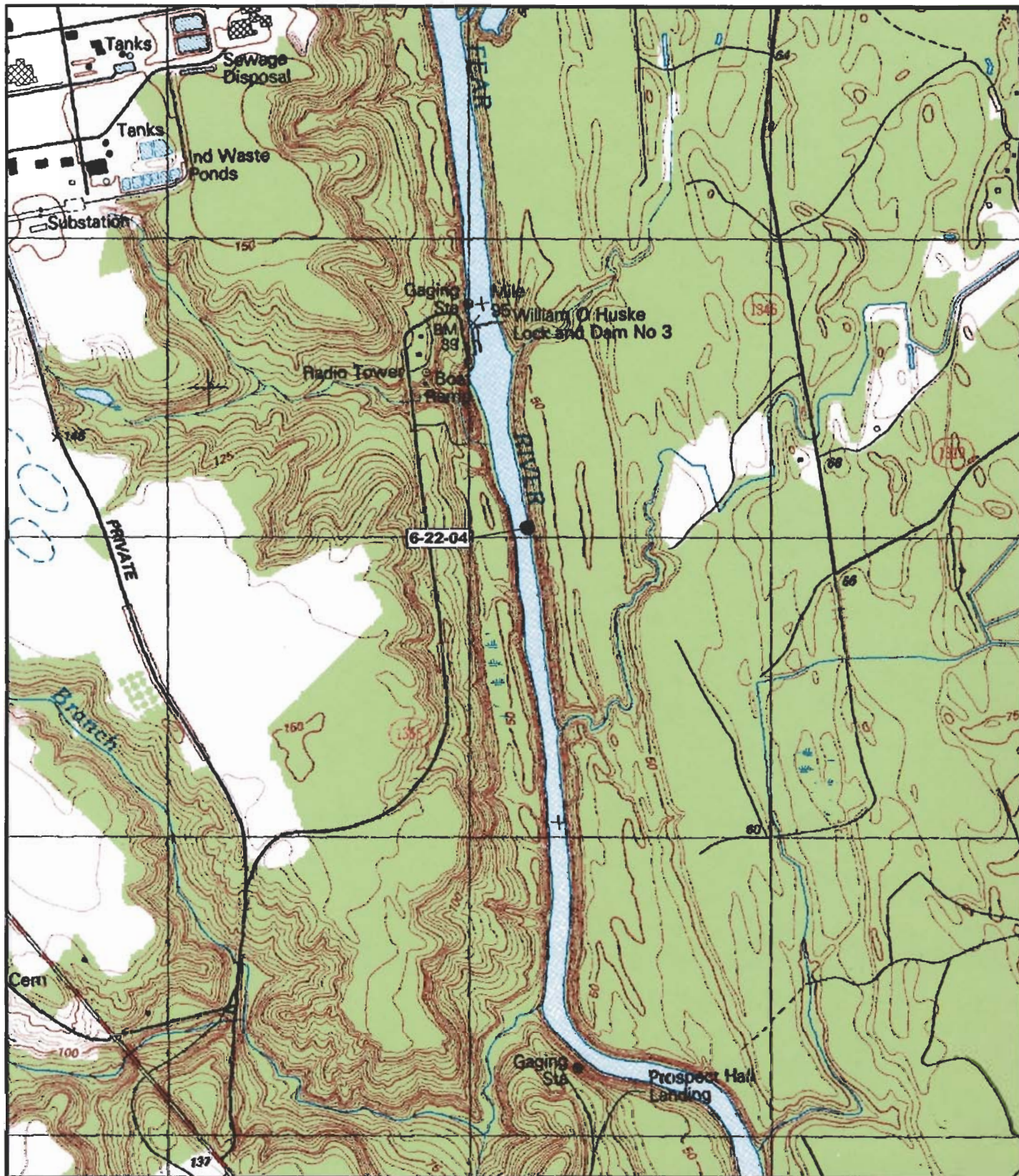


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8253  
FAX 910/382-9139

CP#1976.00

2 OF 3





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5015**

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5015-04

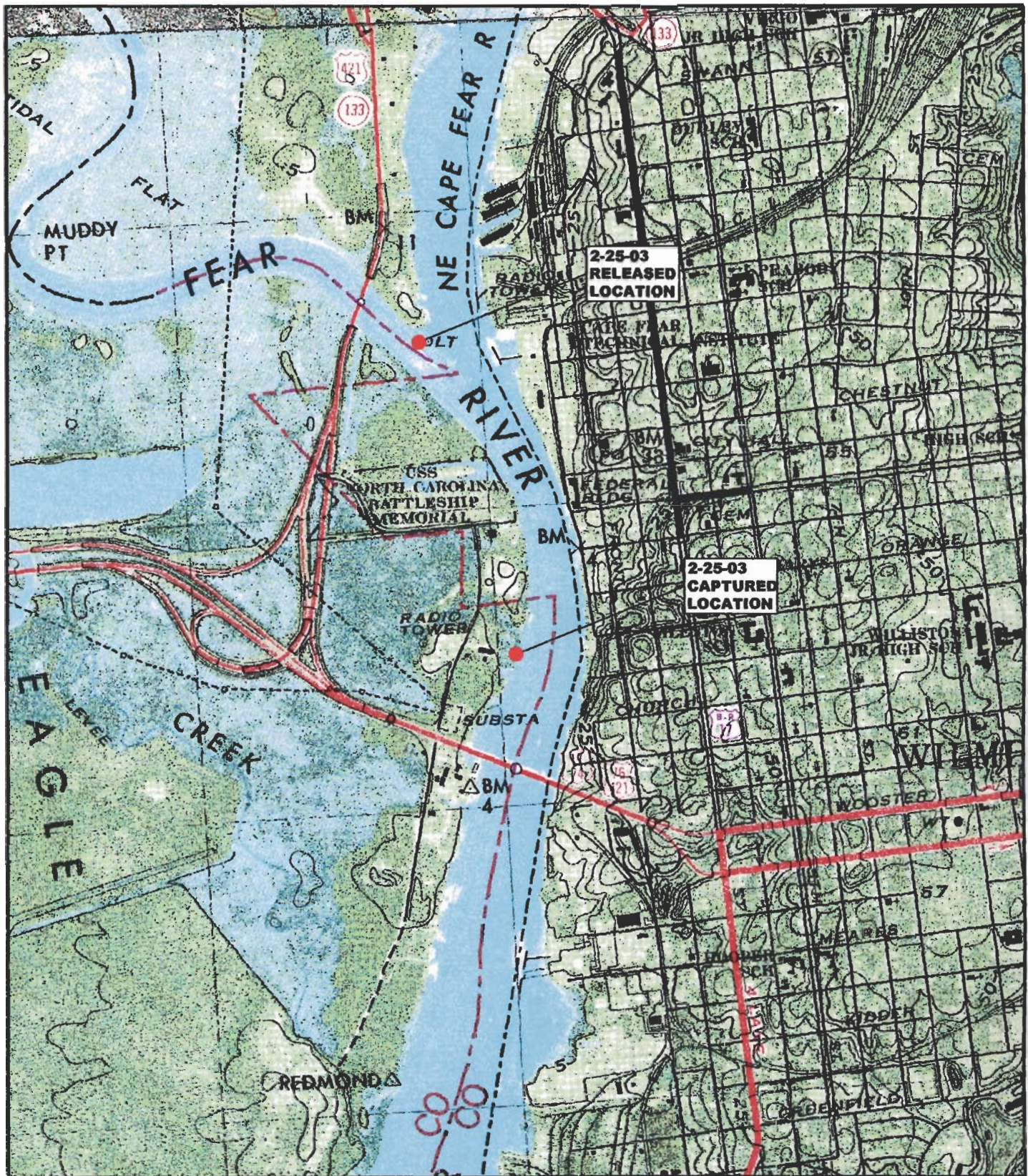


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-8253  
 FAX 910/392-9139

CP#1976.00

3 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5016**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/9/04

FILE: CZR5016-04

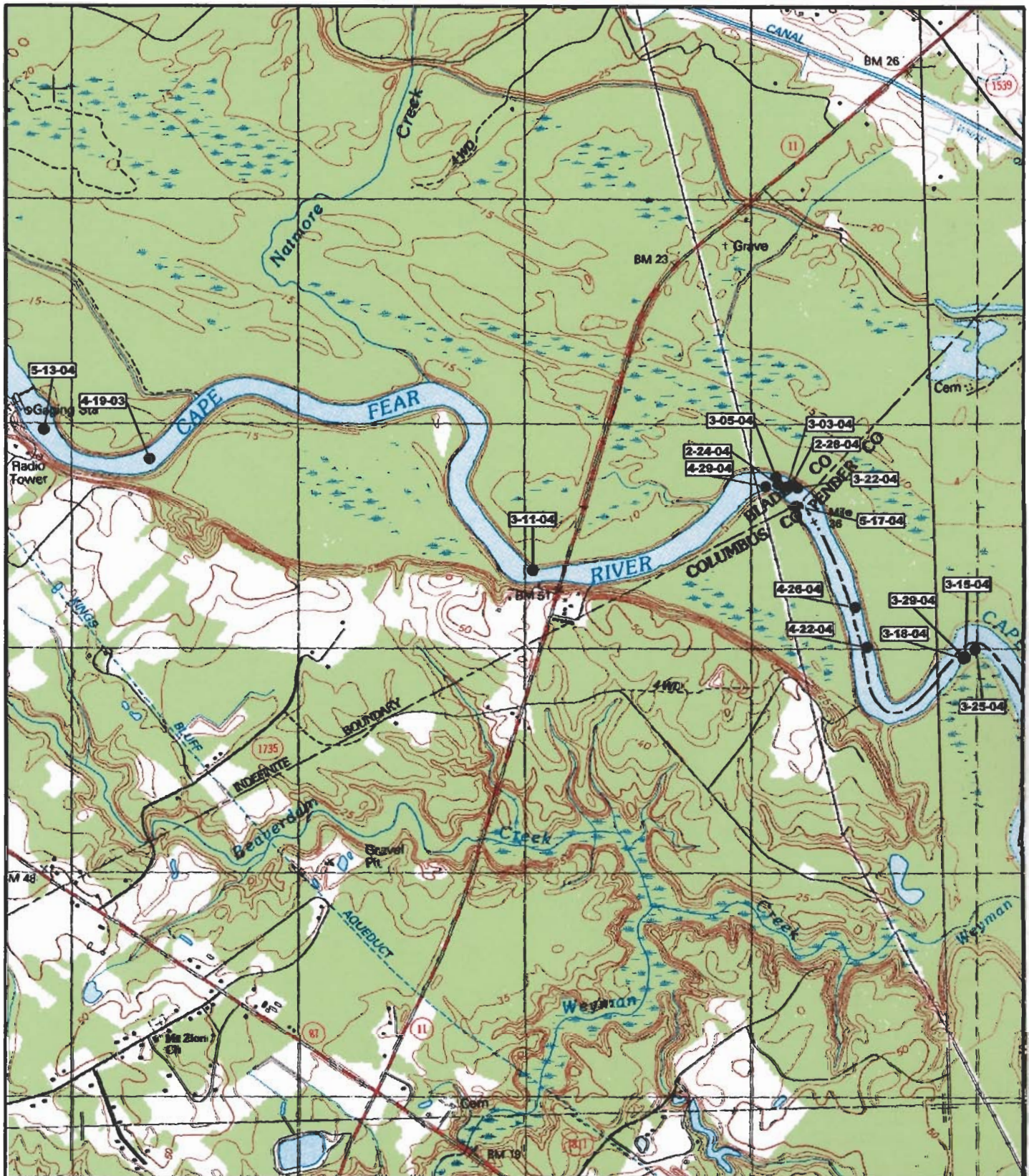


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8138

CP#1976.00

1 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 2000 4000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5016**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/fJB

FILE: CZR5016-04

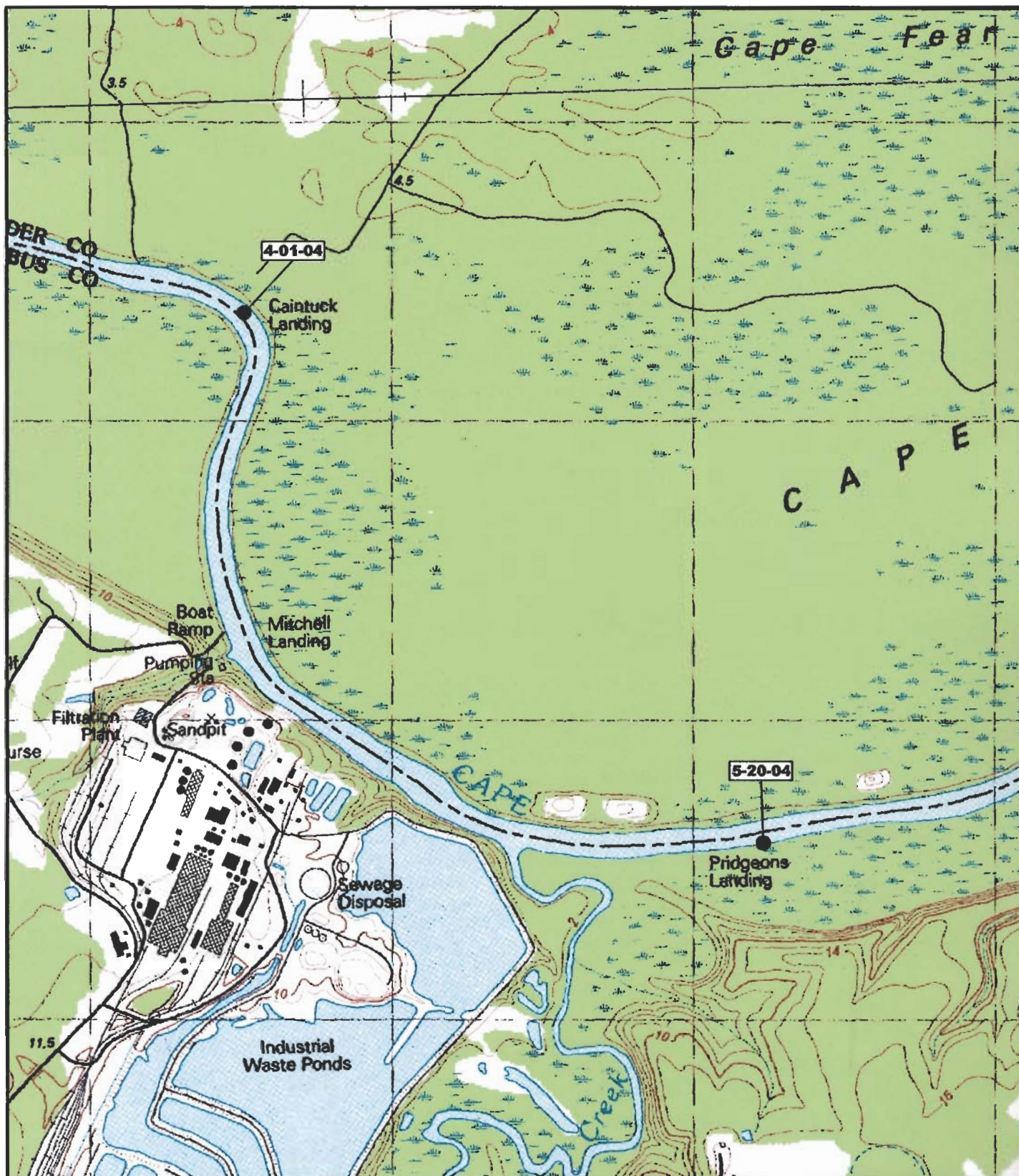


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5016**

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5016-04

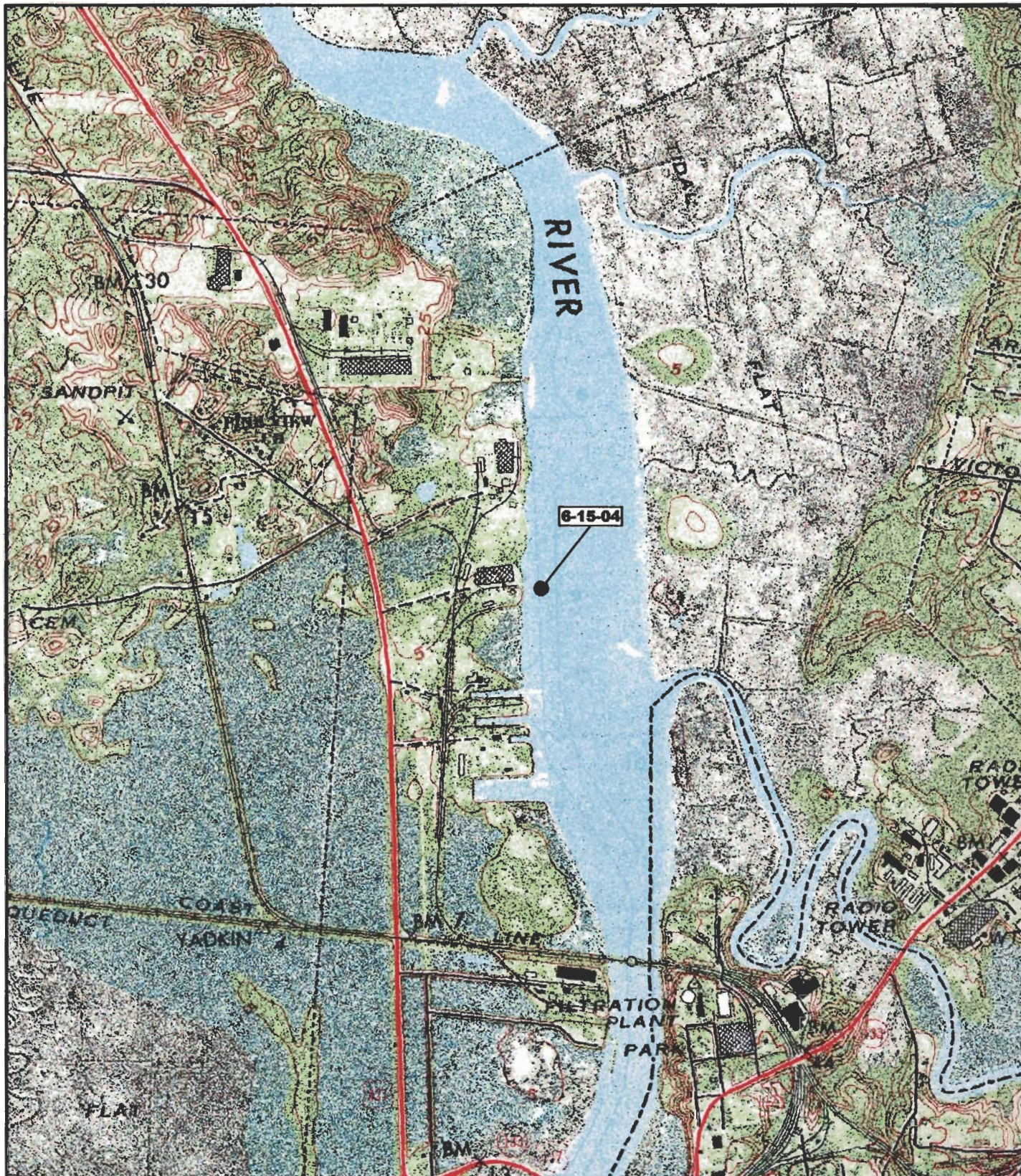


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

3 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000

SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5016**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5016-04



4709 COLLEGE ACRES DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

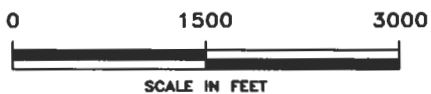
CP#1976.00

4 of 4



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5018

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5018-04



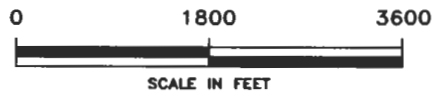
4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5019

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

1/11/11

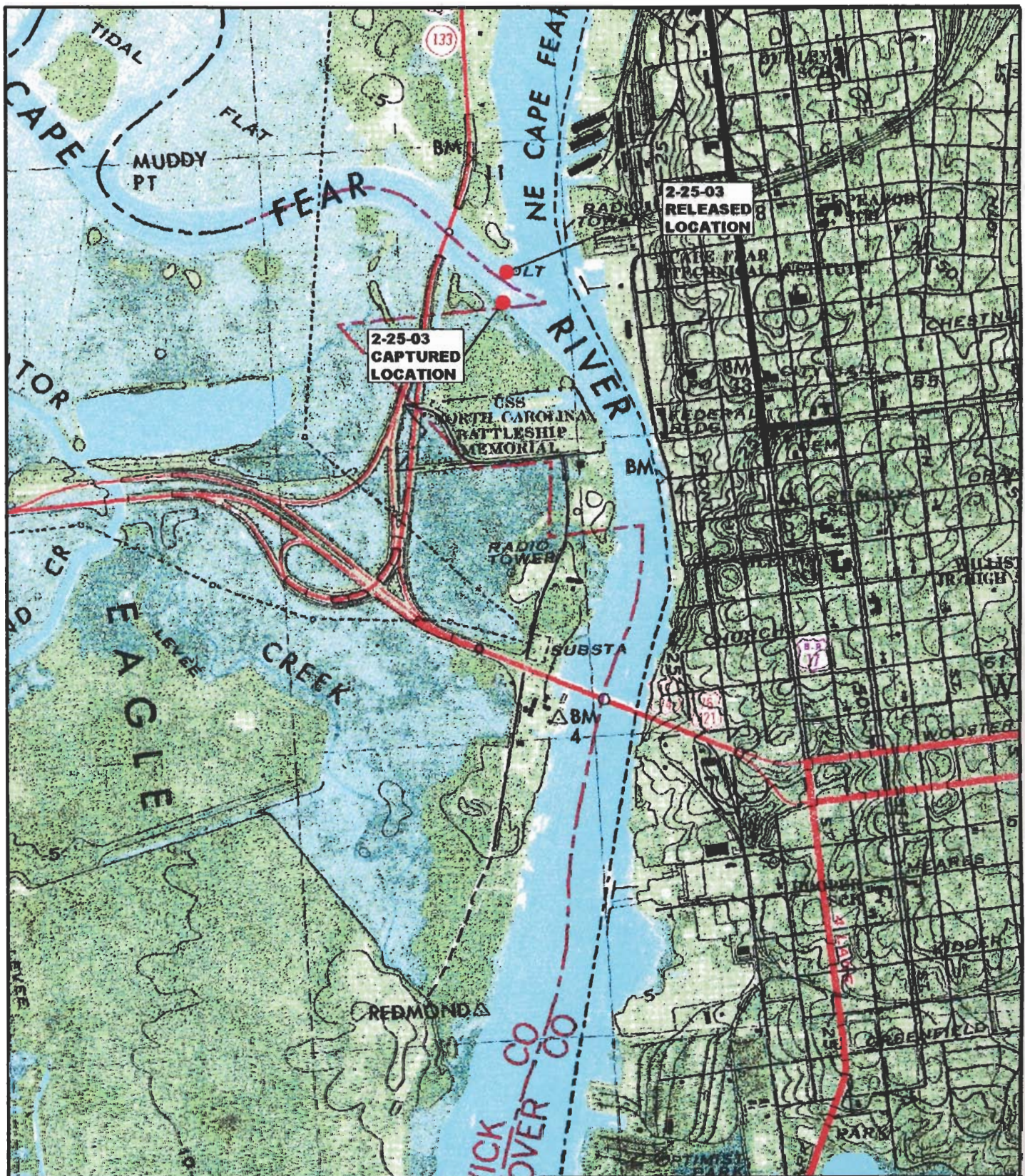
FILE: CZR5019-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5023

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN APPROVED BY:  
DATE: 8/24/04

DRAWN BY: TLJ/TJB  
FILE: CZR5023-04

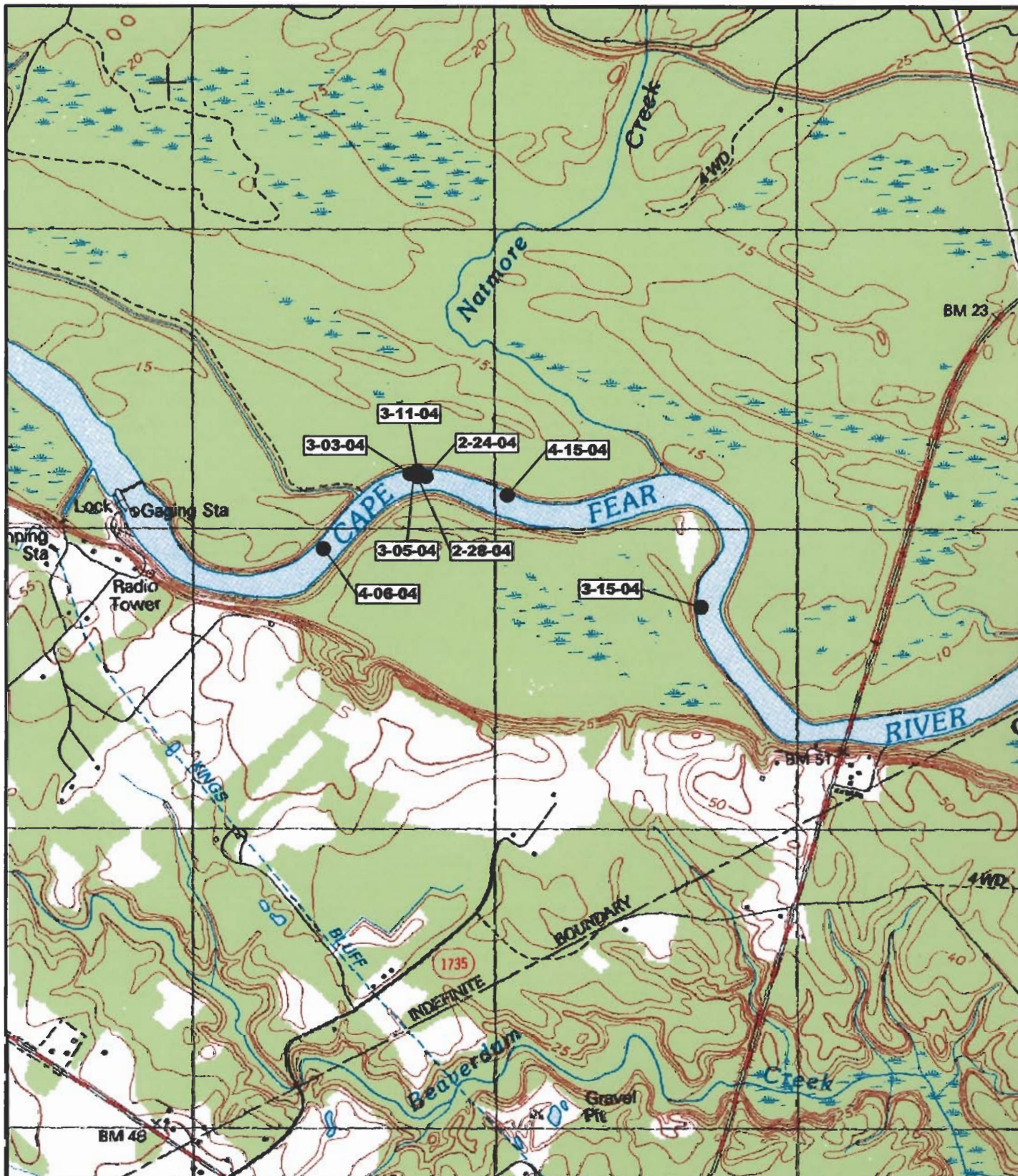


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9138

CP#1976.00

1 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5023

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

FILE: CZR5023-04

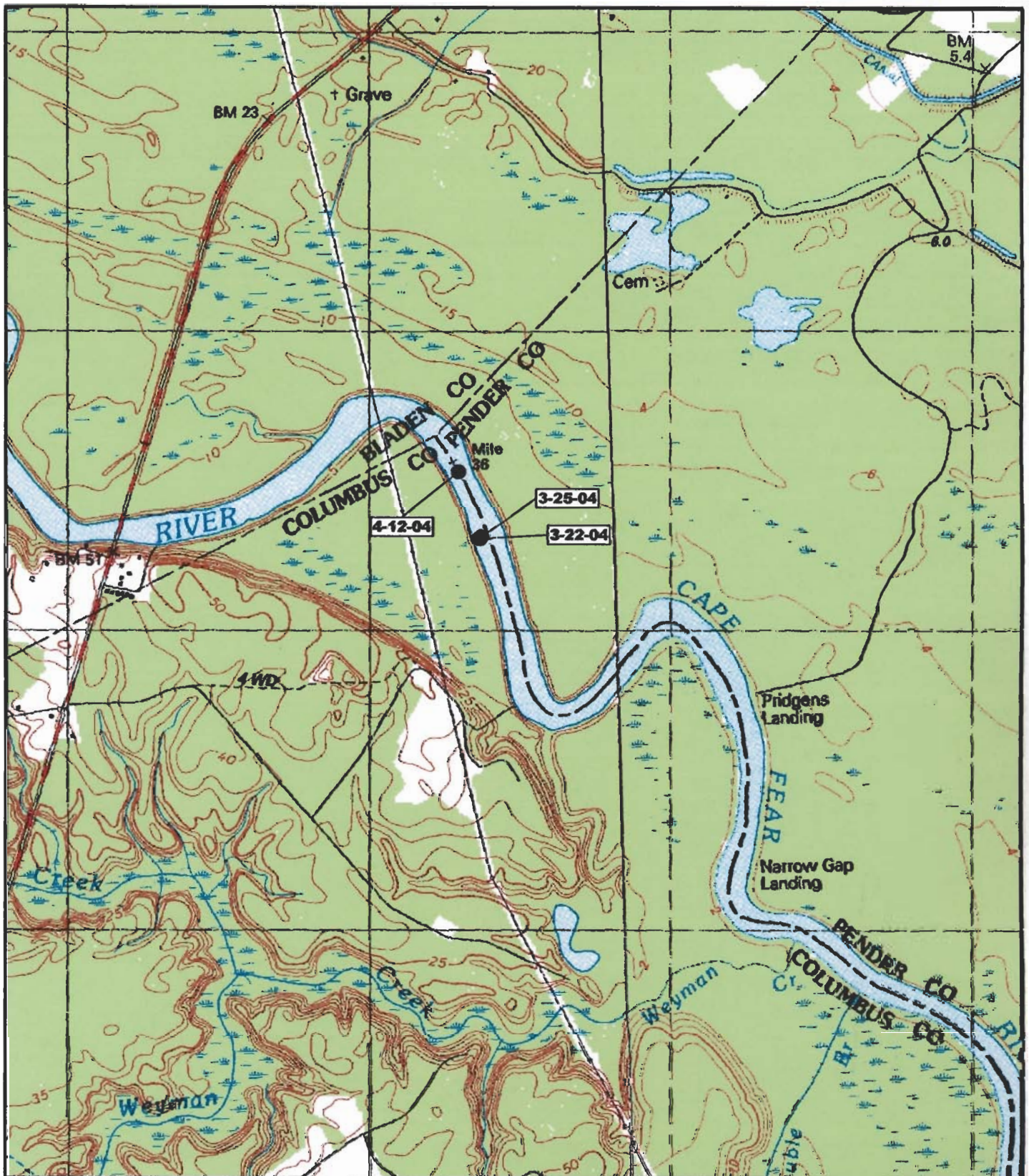


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5023**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TBJ/TJB

DATE: 8/10/04

FILE: CZR5023-04

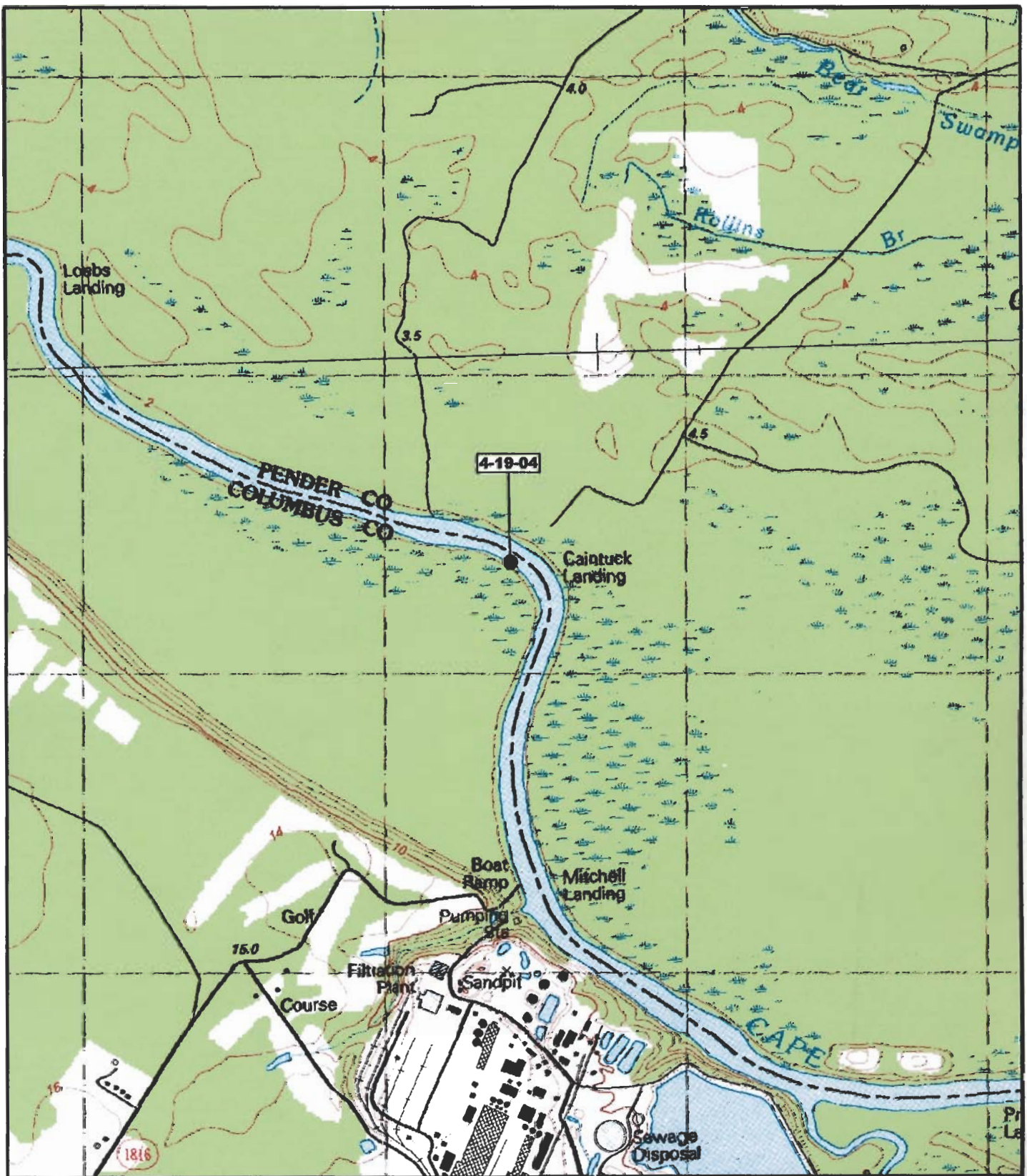


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-25-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5023**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5023-04

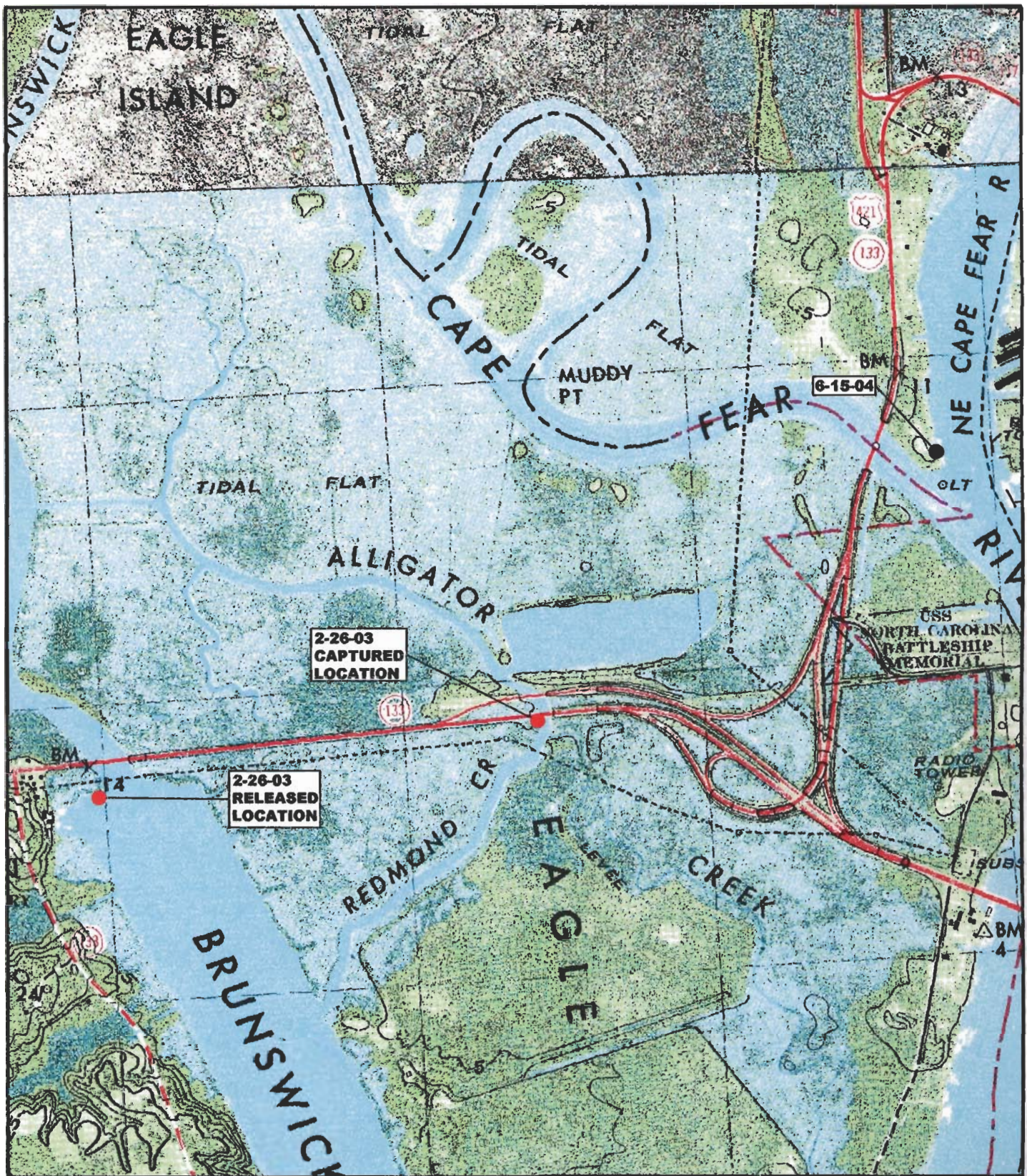


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 OF 4





SITE OF RELOCATED STRIPED BASS  
CZR5026

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5026-04

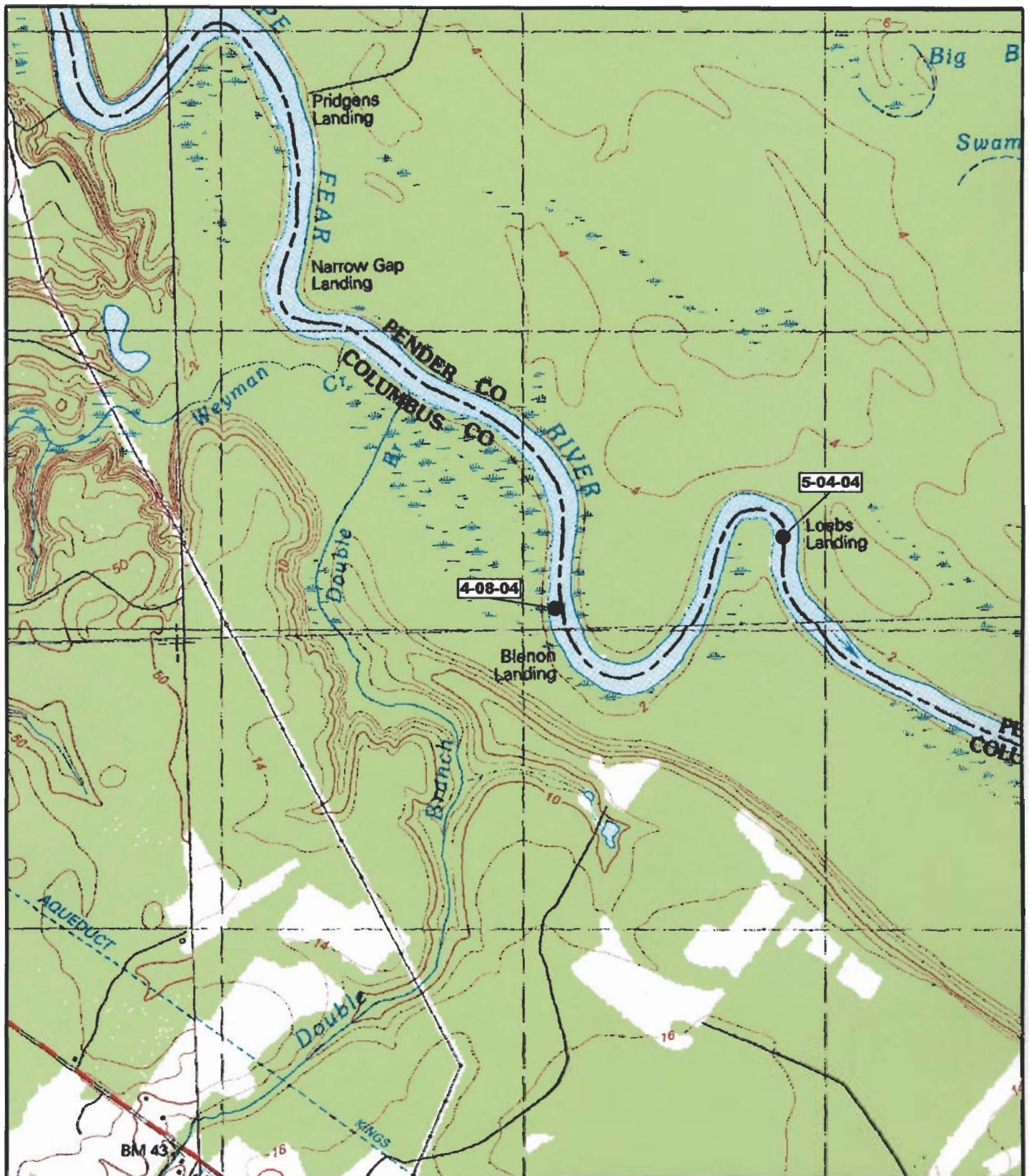


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8139

CP#1976.00

1 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-26-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5026**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5026-04

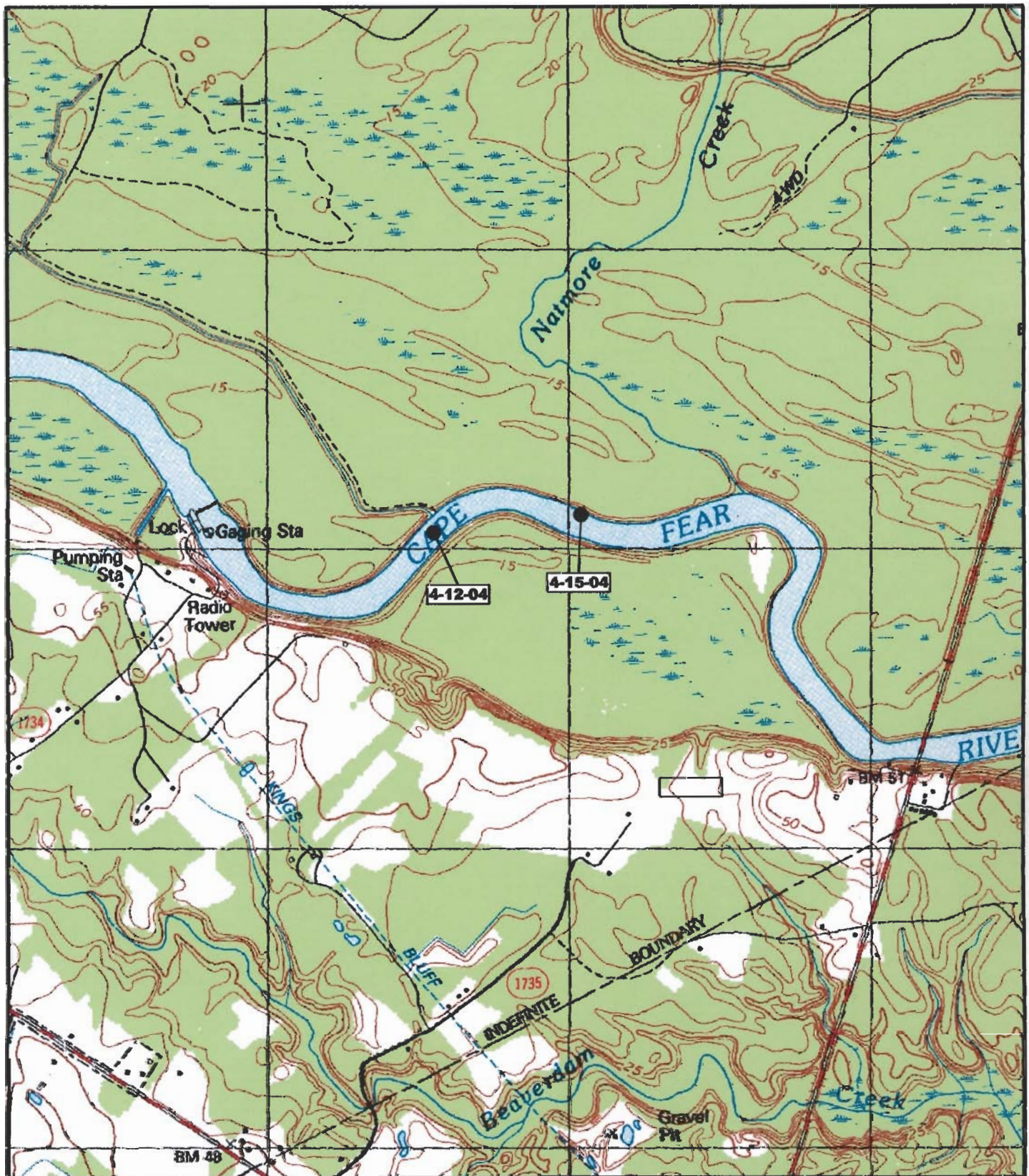


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-26-03
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5026

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TJJ/TJB

FILE: CZR5026-04

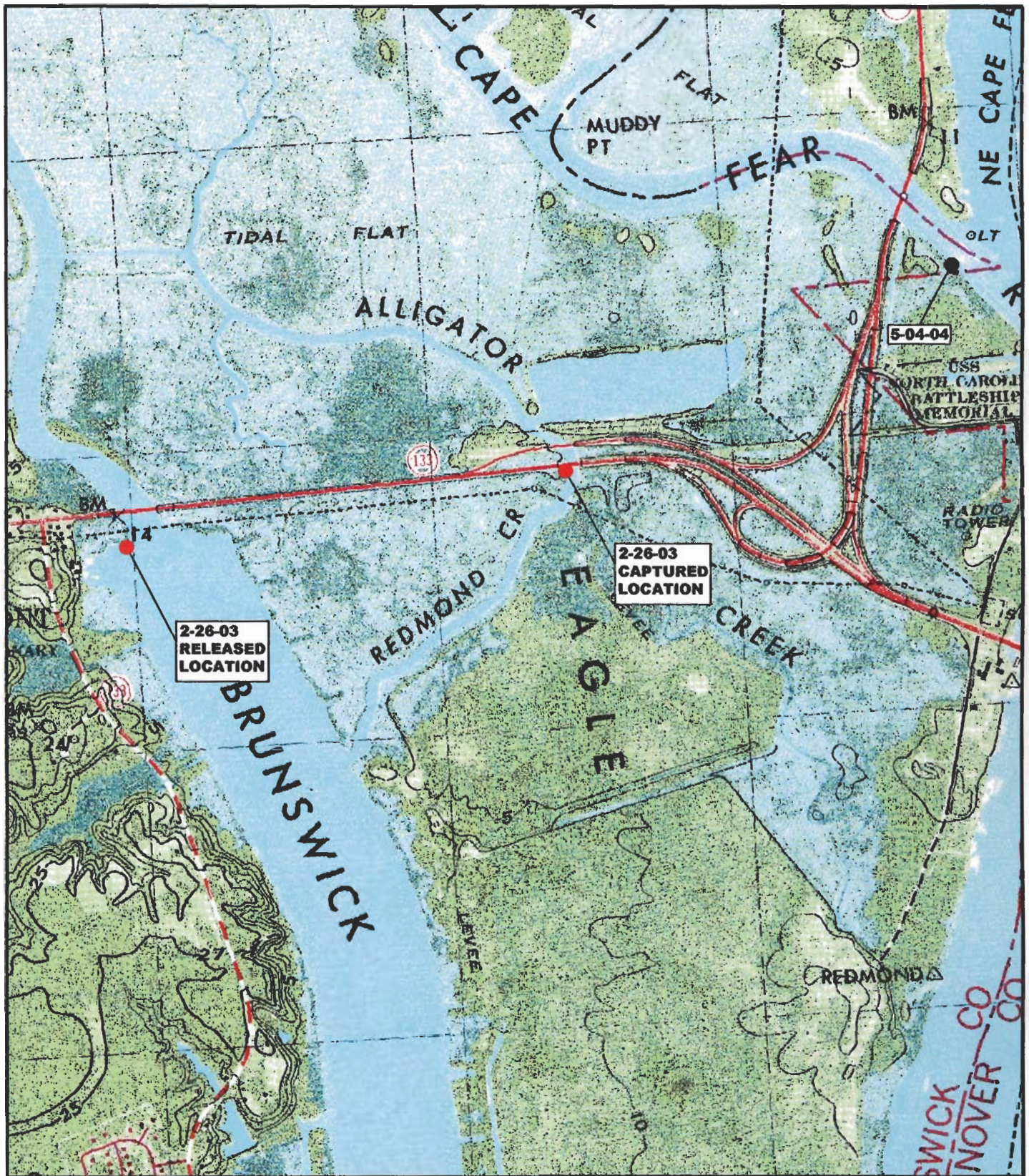


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-26-03**
- **SITE OF RELOCATED FISH**

0 1500 3000

SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5029

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

FILE: CZR5029-04

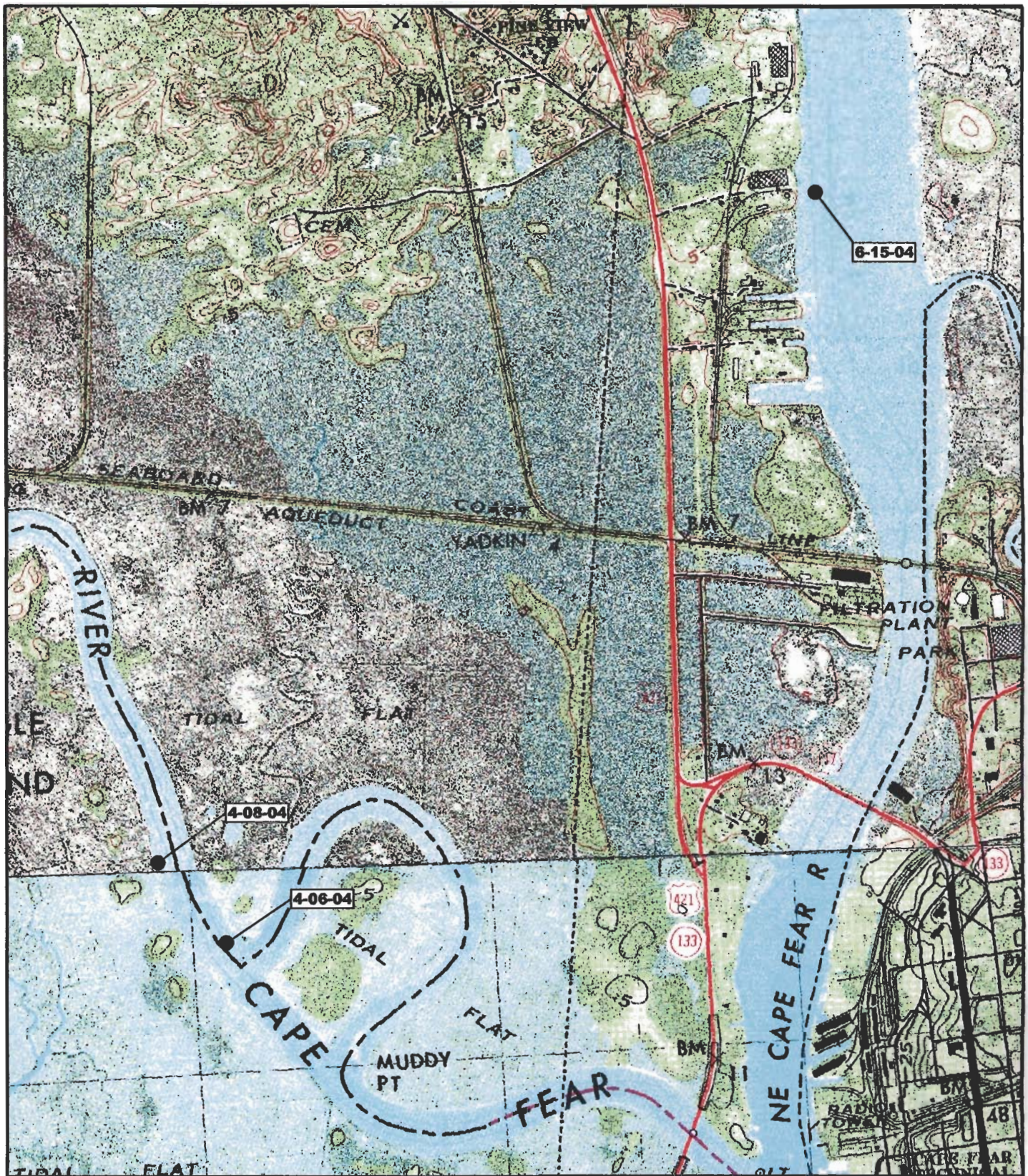


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-26-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5029**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/10/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5029-04



4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9138

CP#1976.00

2 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-18-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5118**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5118-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8253  
FAX 910/382-9139

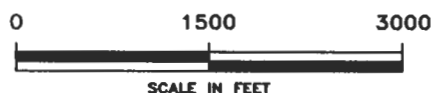
CP#1976.00

1 OF 3



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-18-03**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5118

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5118-04

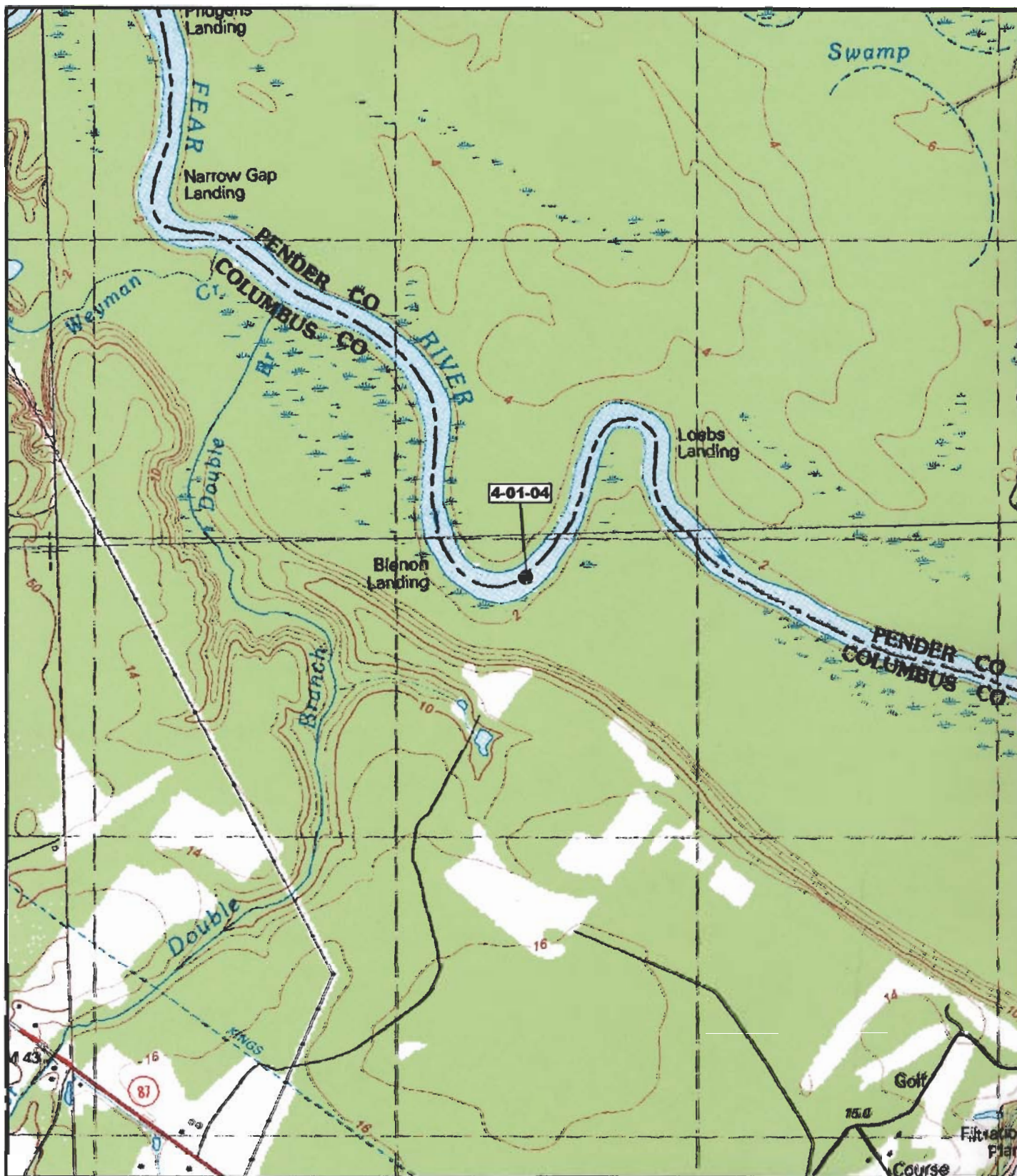


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-18-03**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5118**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5118-04

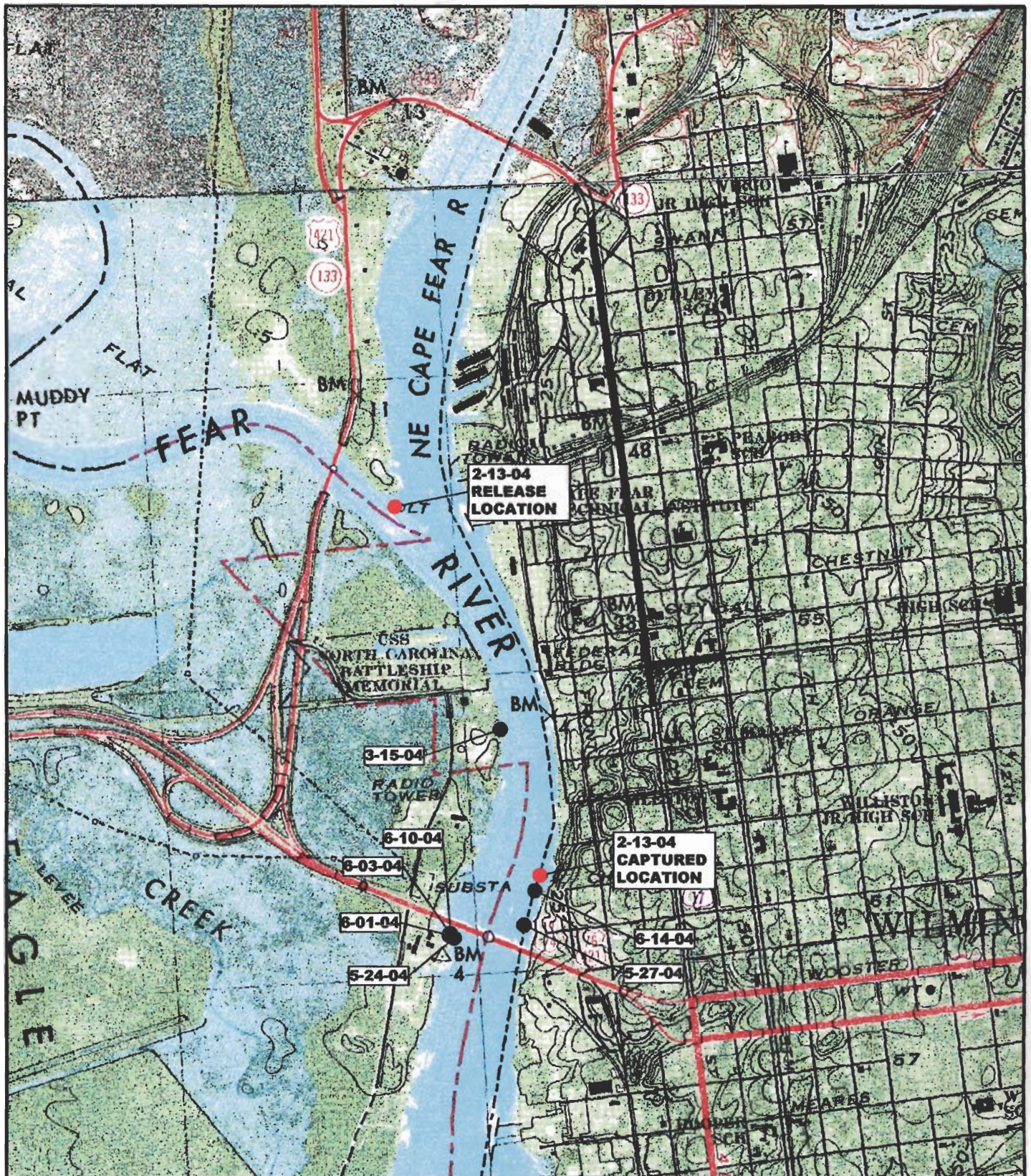


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF TAGGED FISH ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5122

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

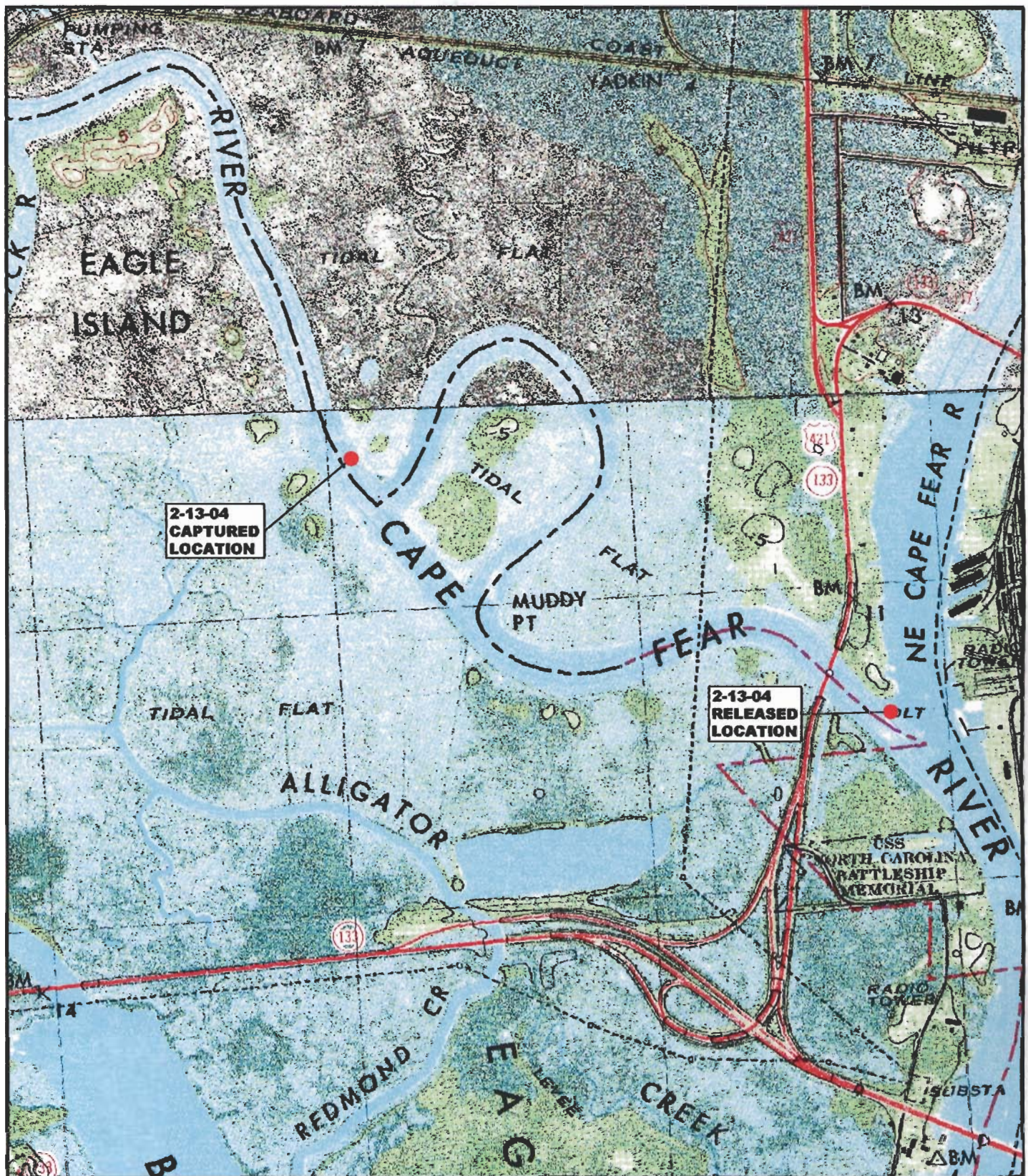
FILE: CZR5122-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-8138

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5123**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 7/06/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5123-04



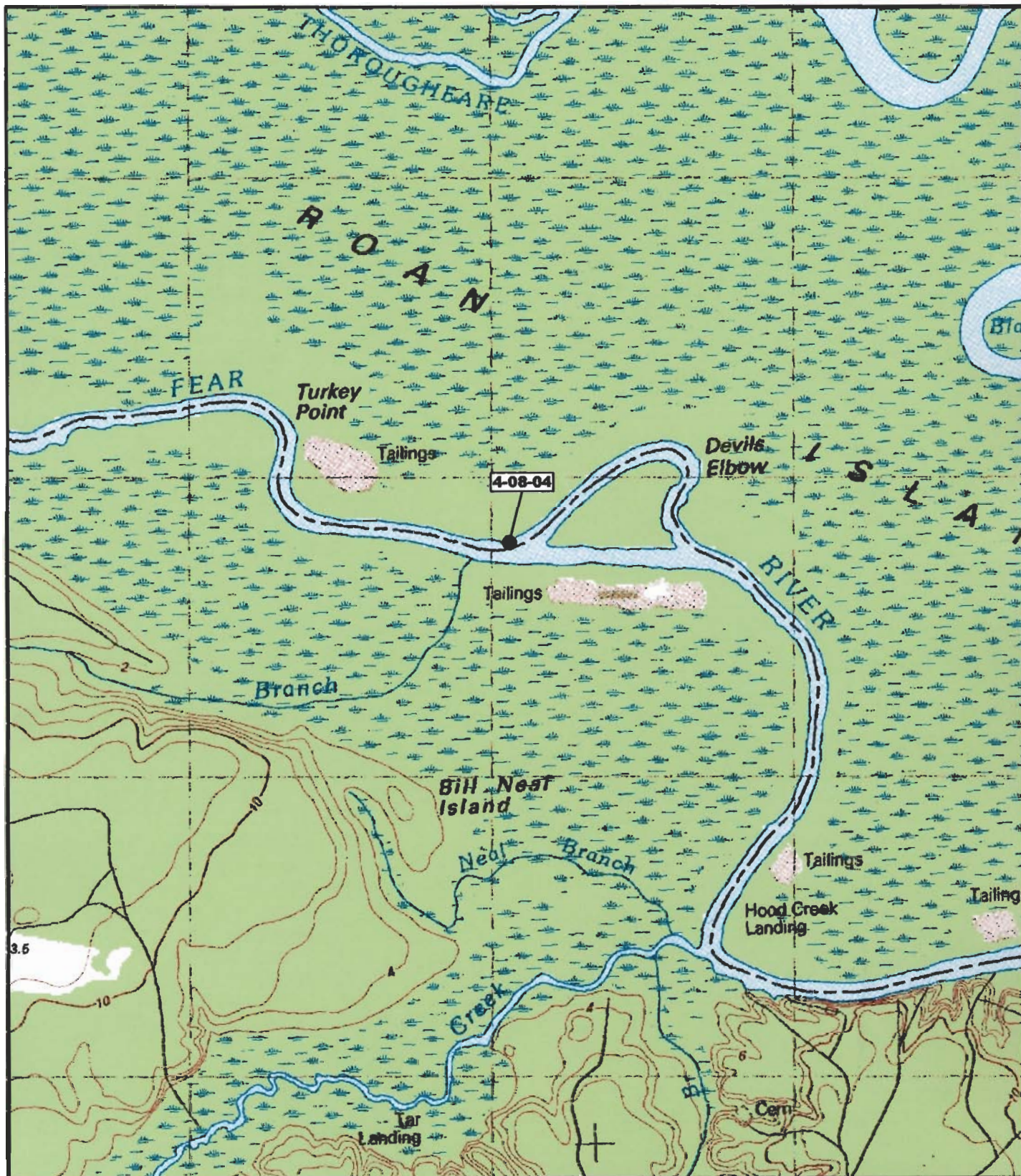
4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

**CP#1976.00**









**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5124

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/06/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5124-04

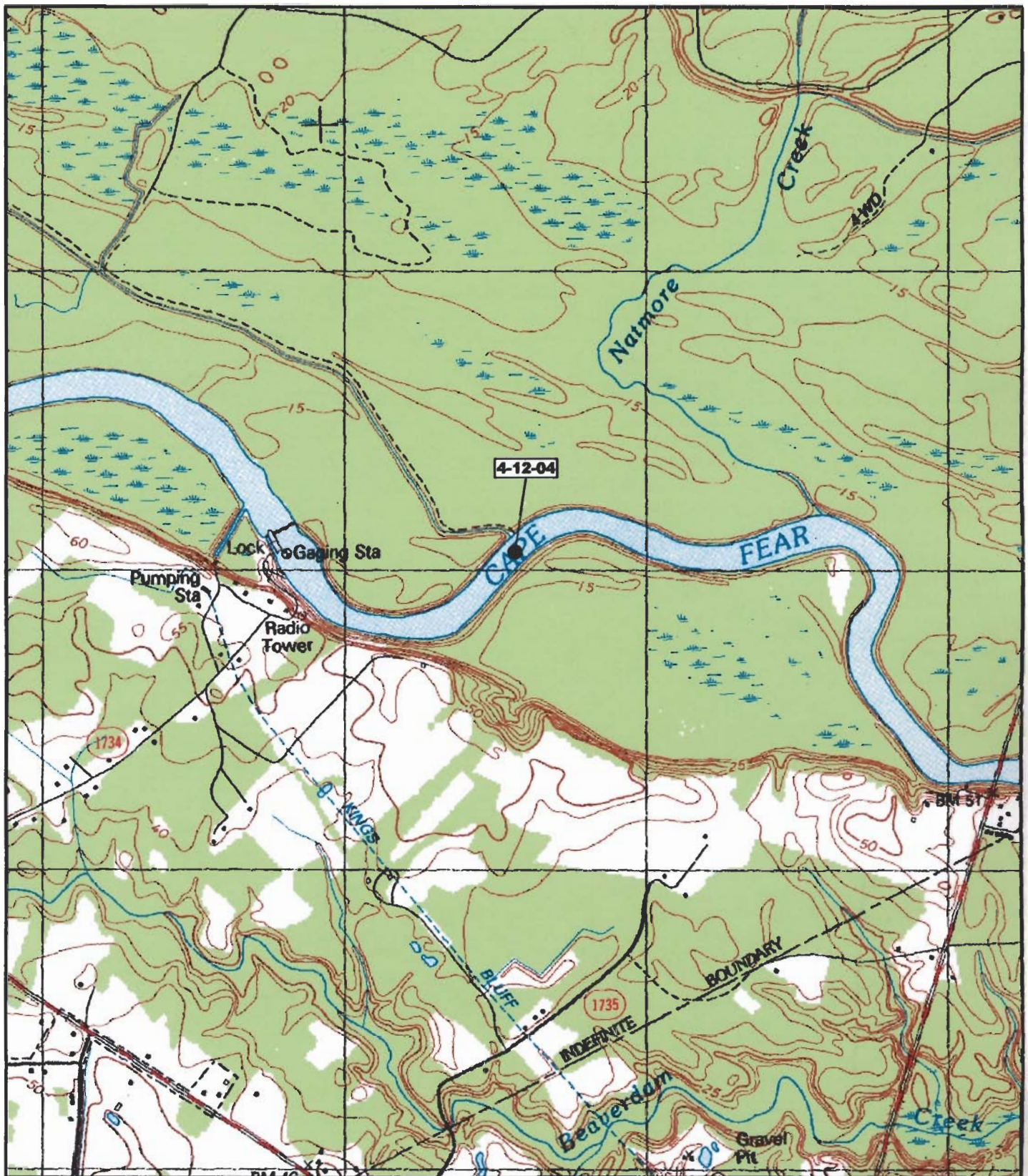


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5124**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/06/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5124-04

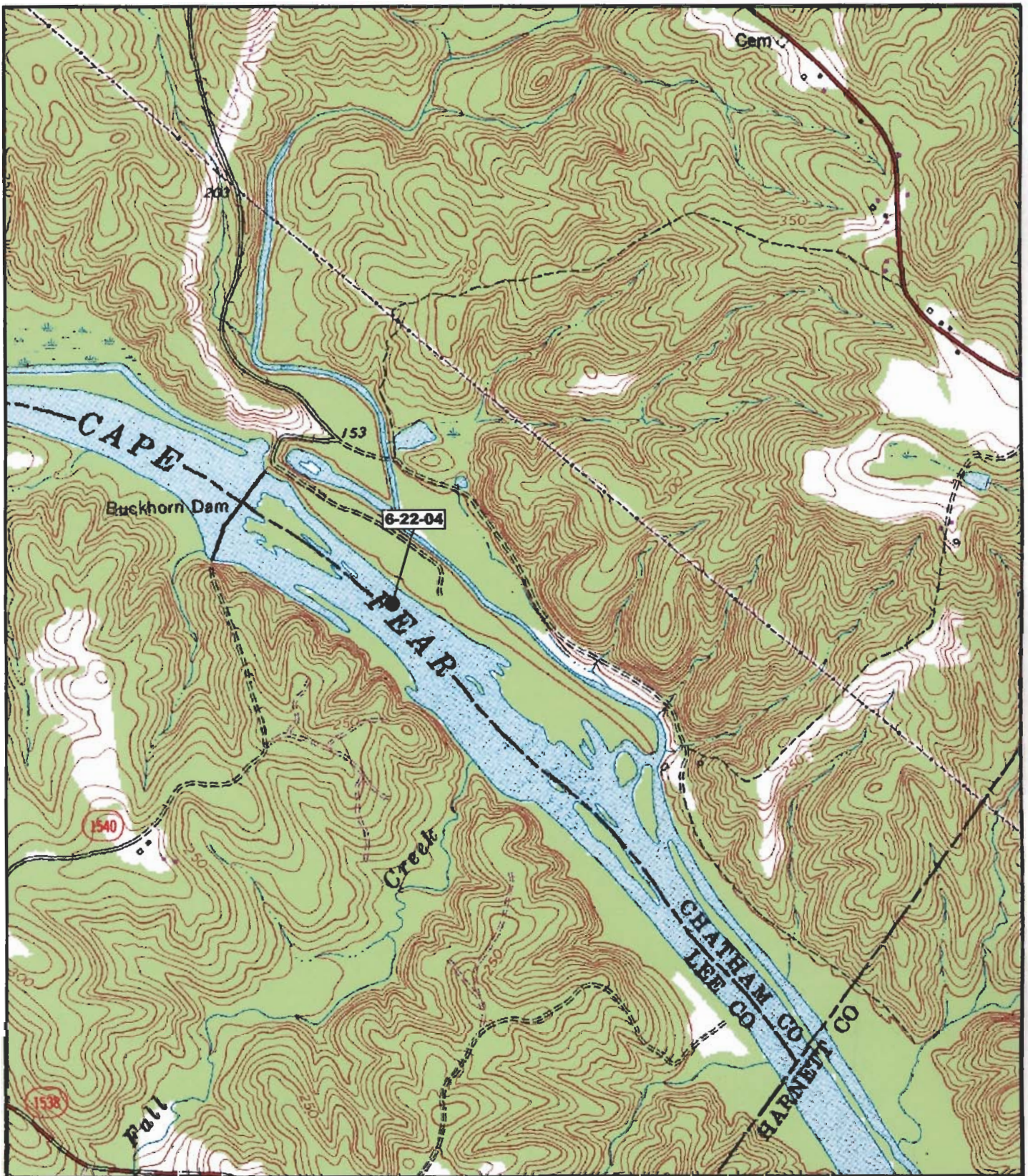


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5124**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/06/04

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5124-04

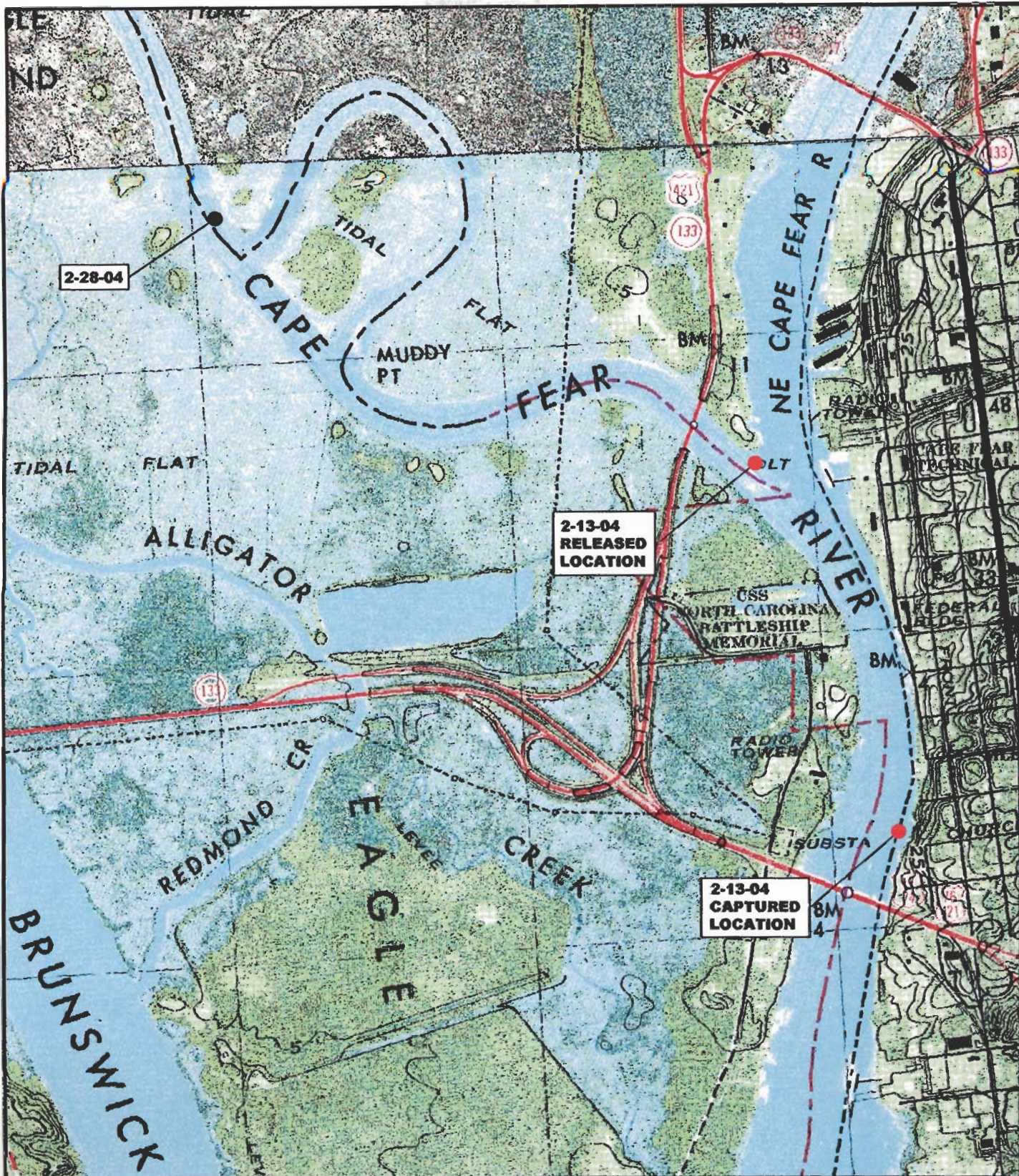


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 OF 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5125

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

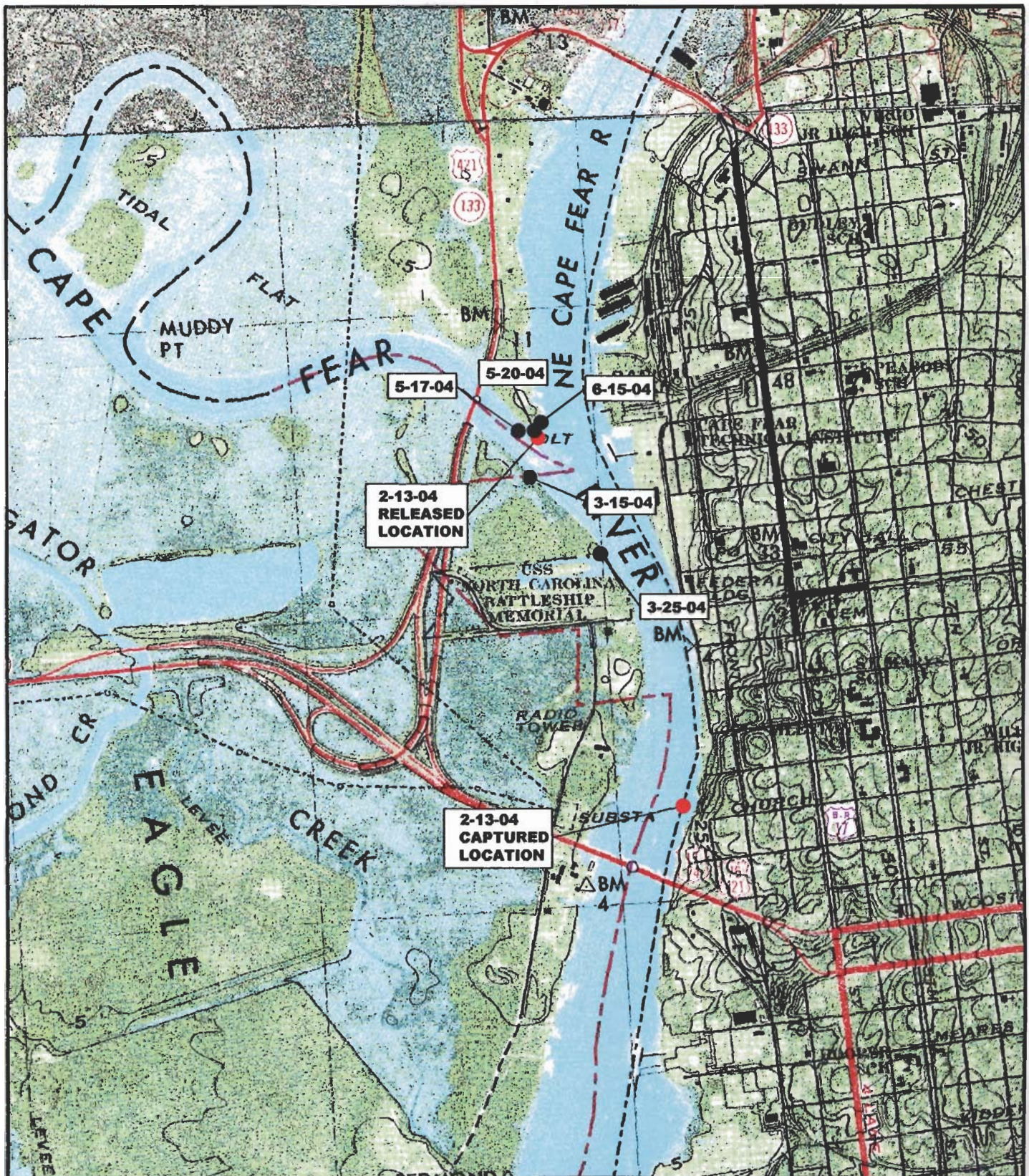
FILE: CZR5125-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5126**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/20/04

FILE: CZR5126-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5126**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5126-04

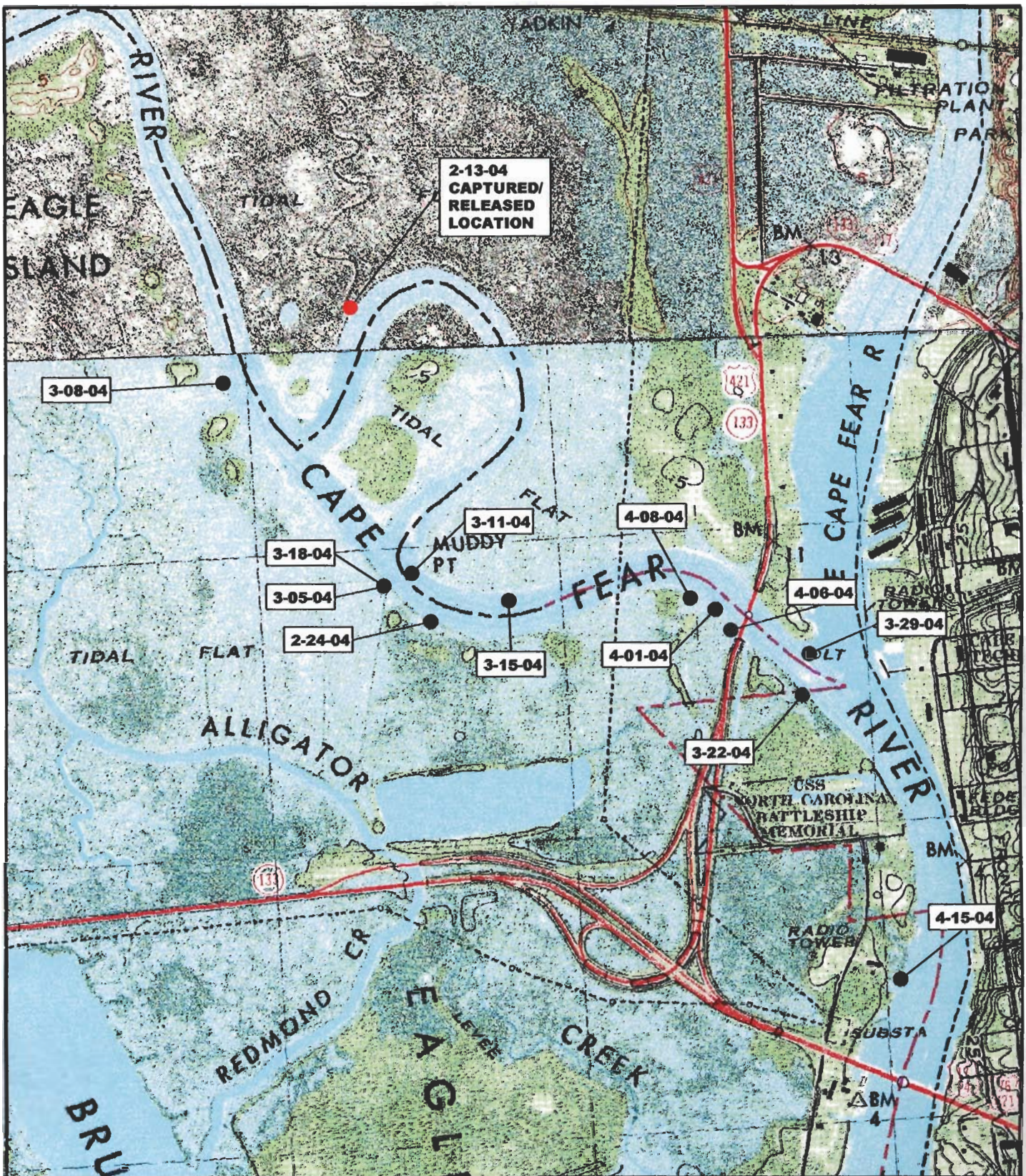


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5127

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/20/04

FILE: CZR5127-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5127

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 7/20/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5127-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5128

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

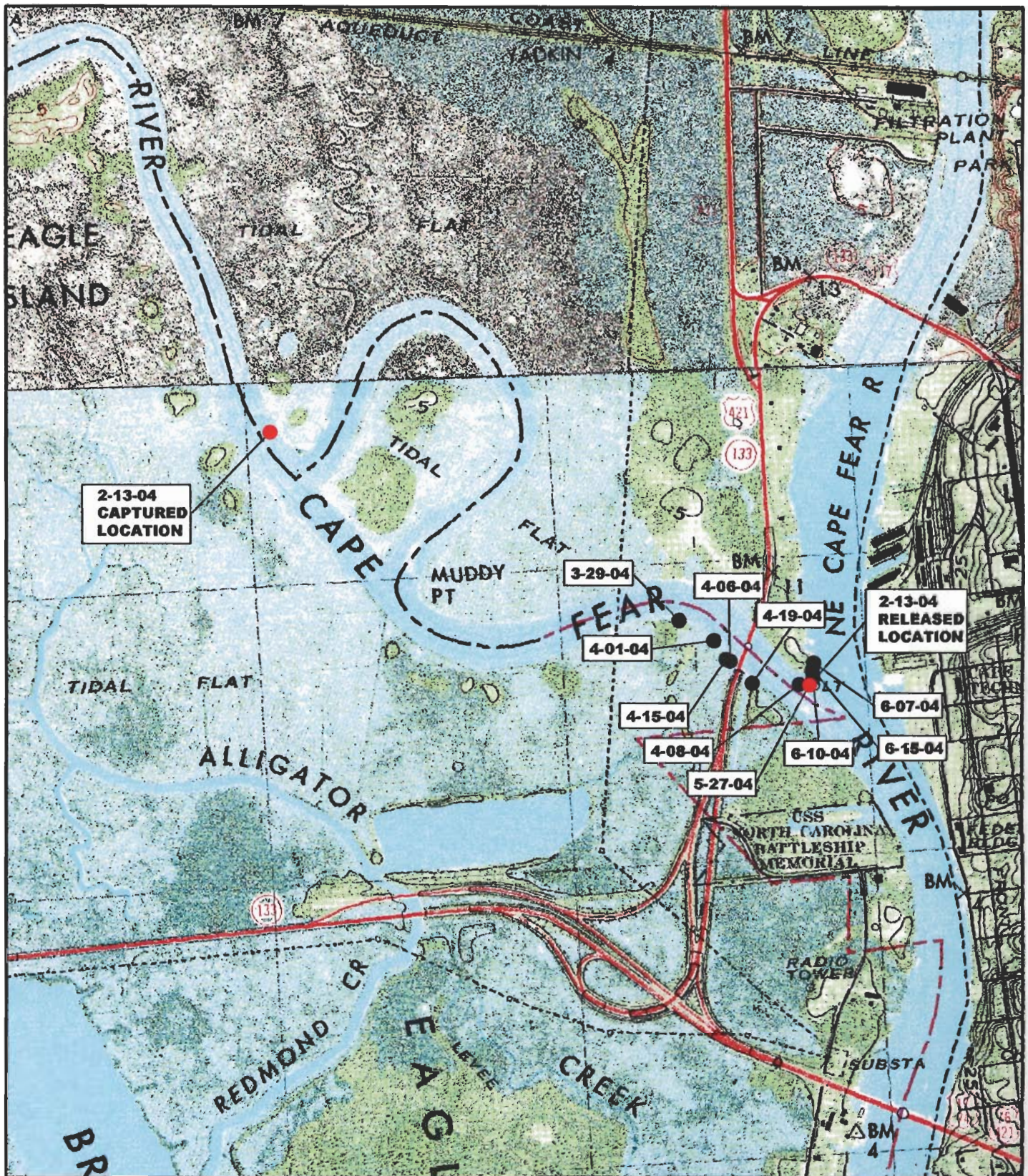
DRAWN BY: TLJ/TJB  
FILE: CZR5128-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
5129

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/21/04

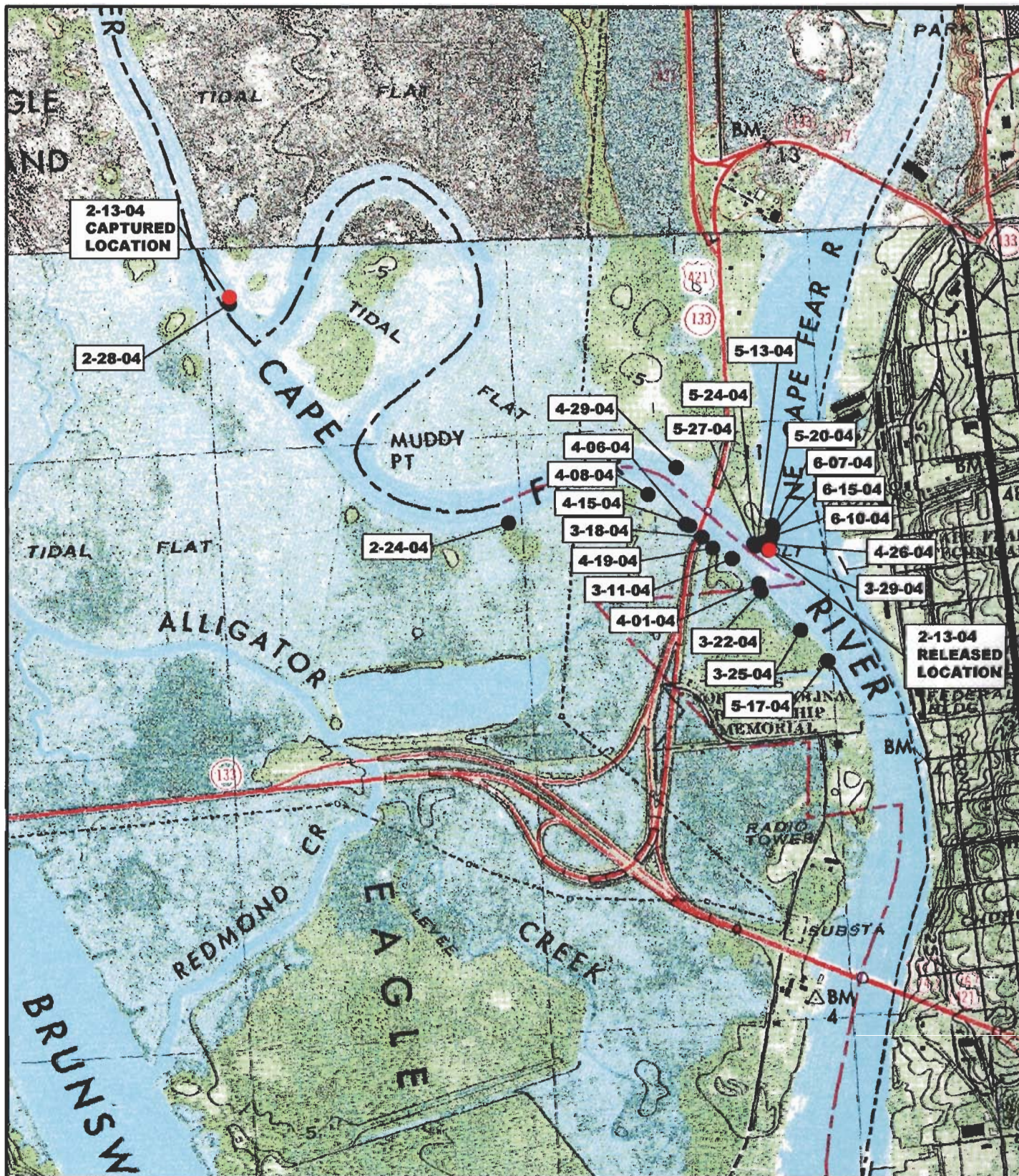
FILE: CZR5129-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-13-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5130**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/10/04

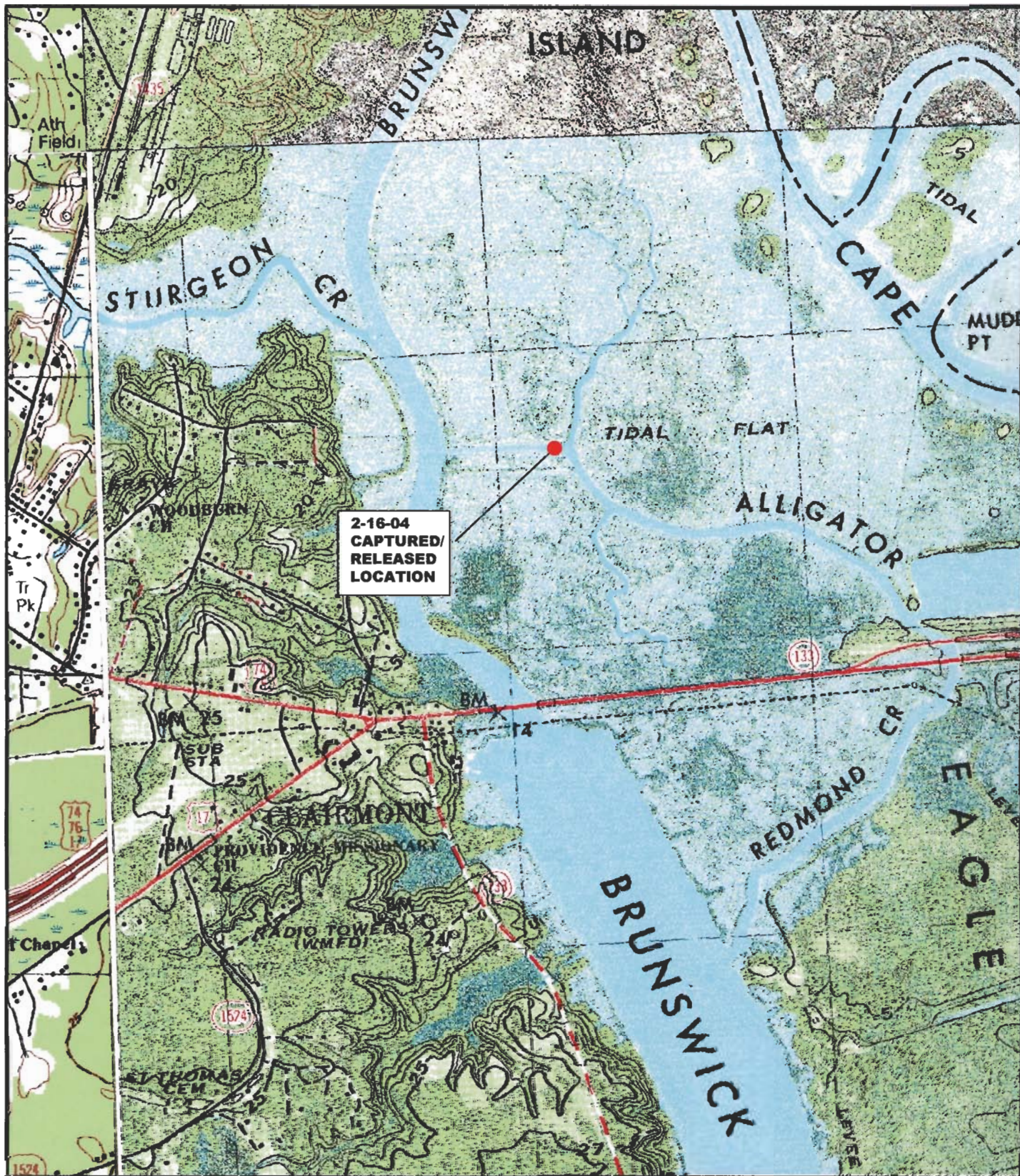
FILE: CZR5130-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5201**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/21/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5201-04

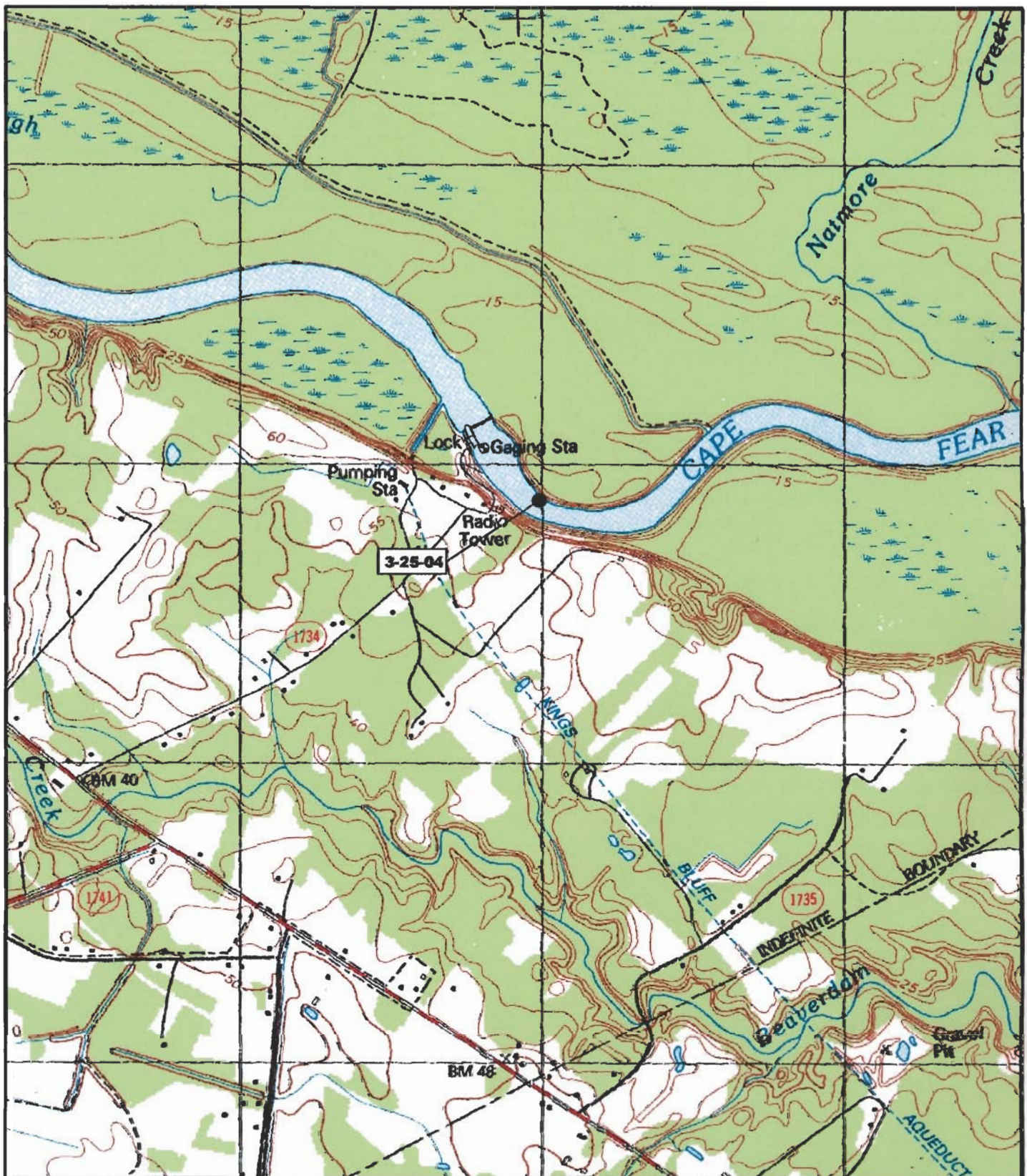


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5201**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/21/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5201-04

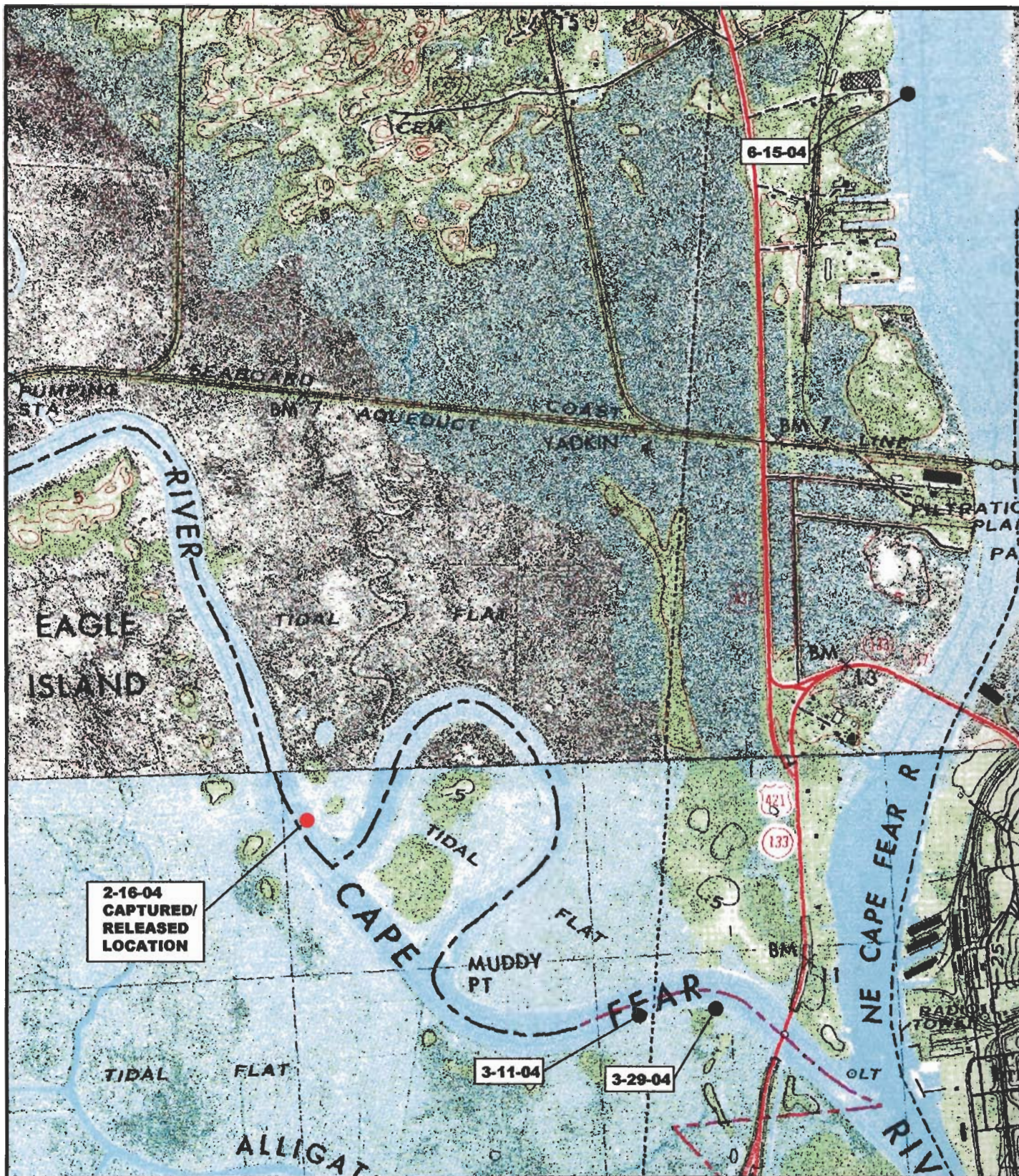


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5202**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5202-04

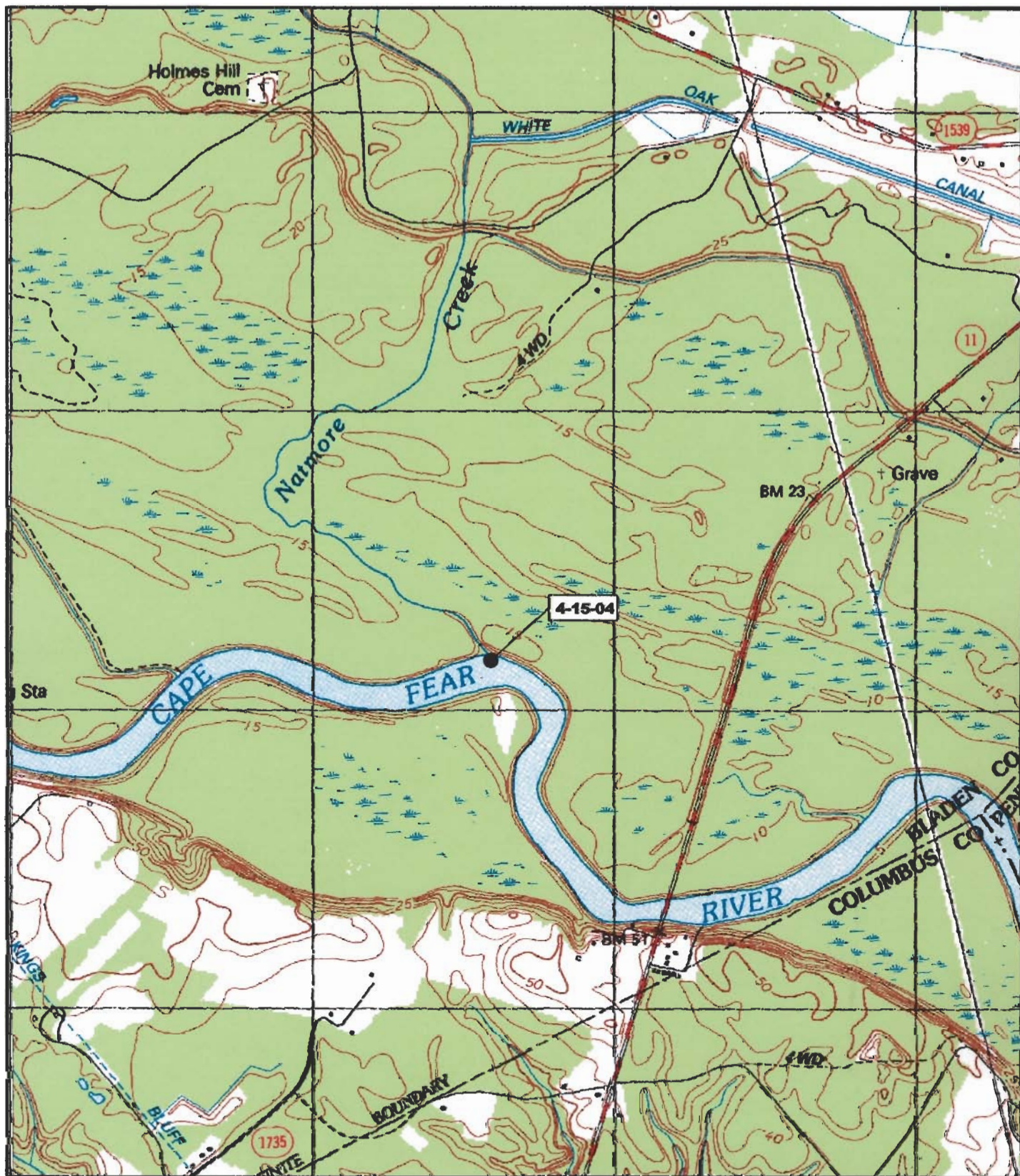


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 3





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5202

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/17/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5202-04

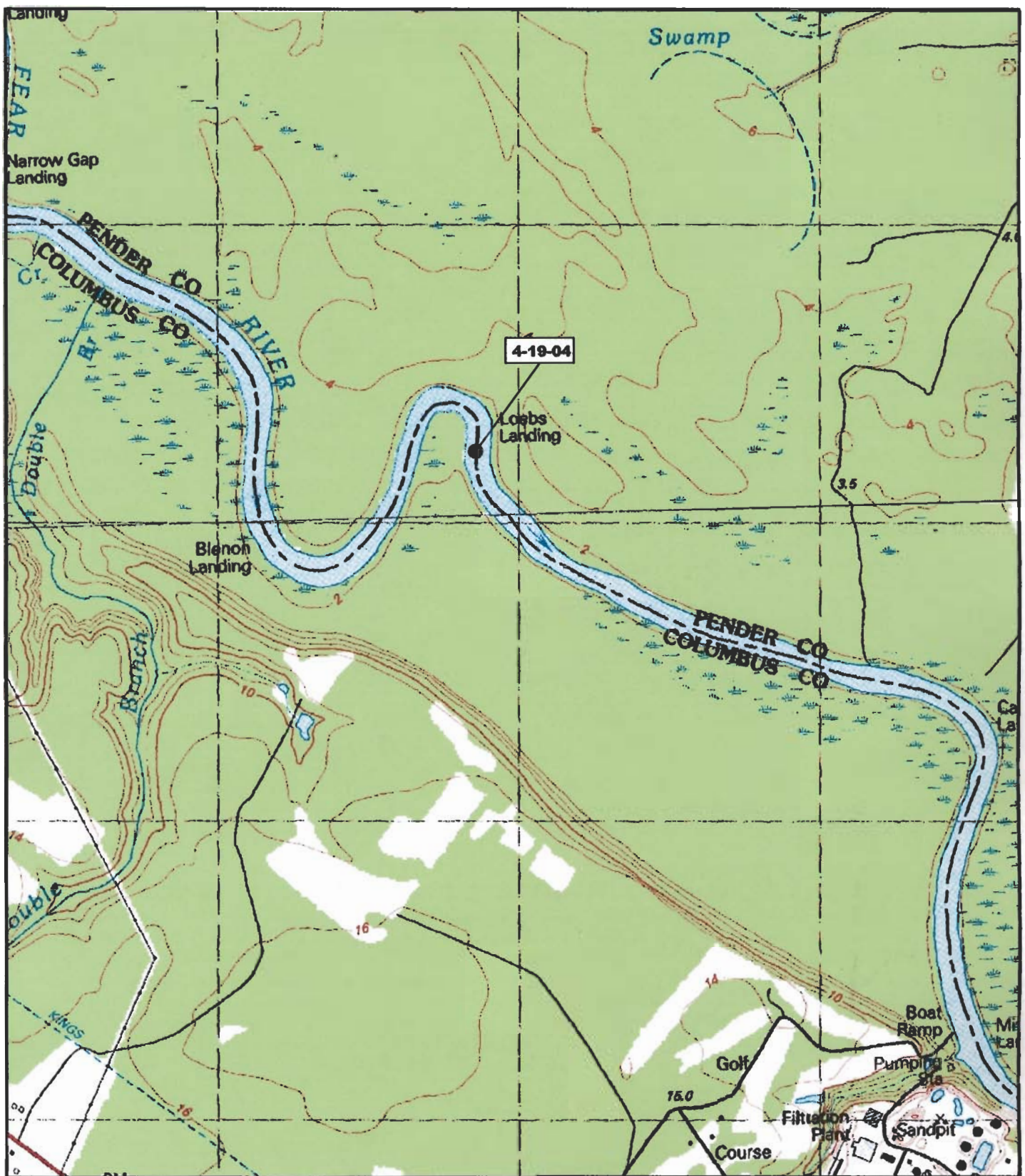


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5202**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/17/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5202-04

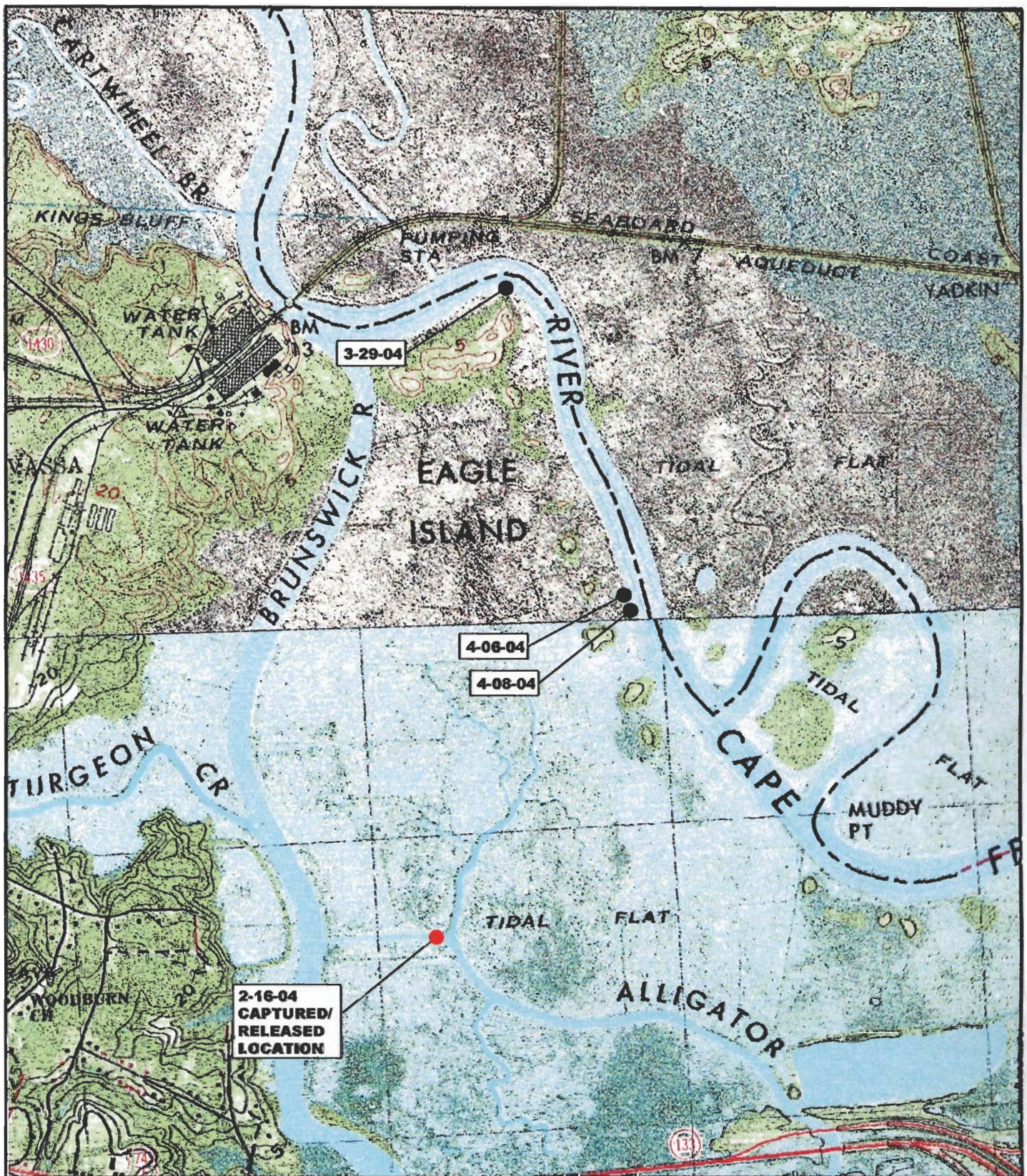


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9159

CP#1976.00

3 of 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5203

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLD/TJB

DATE: 7/22/04

FILE: CZR5203-04

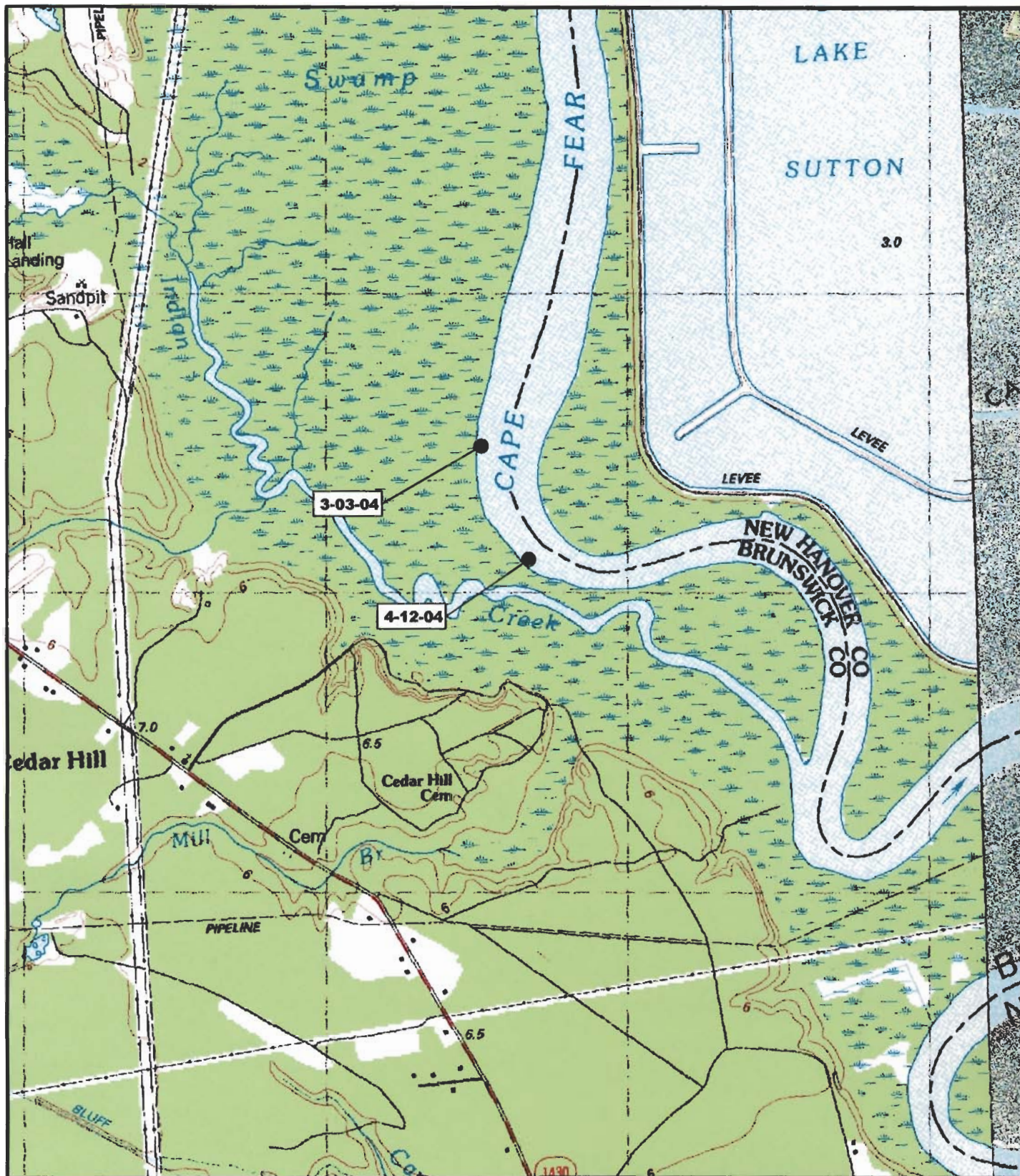


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5203**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/22/04

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5203-04

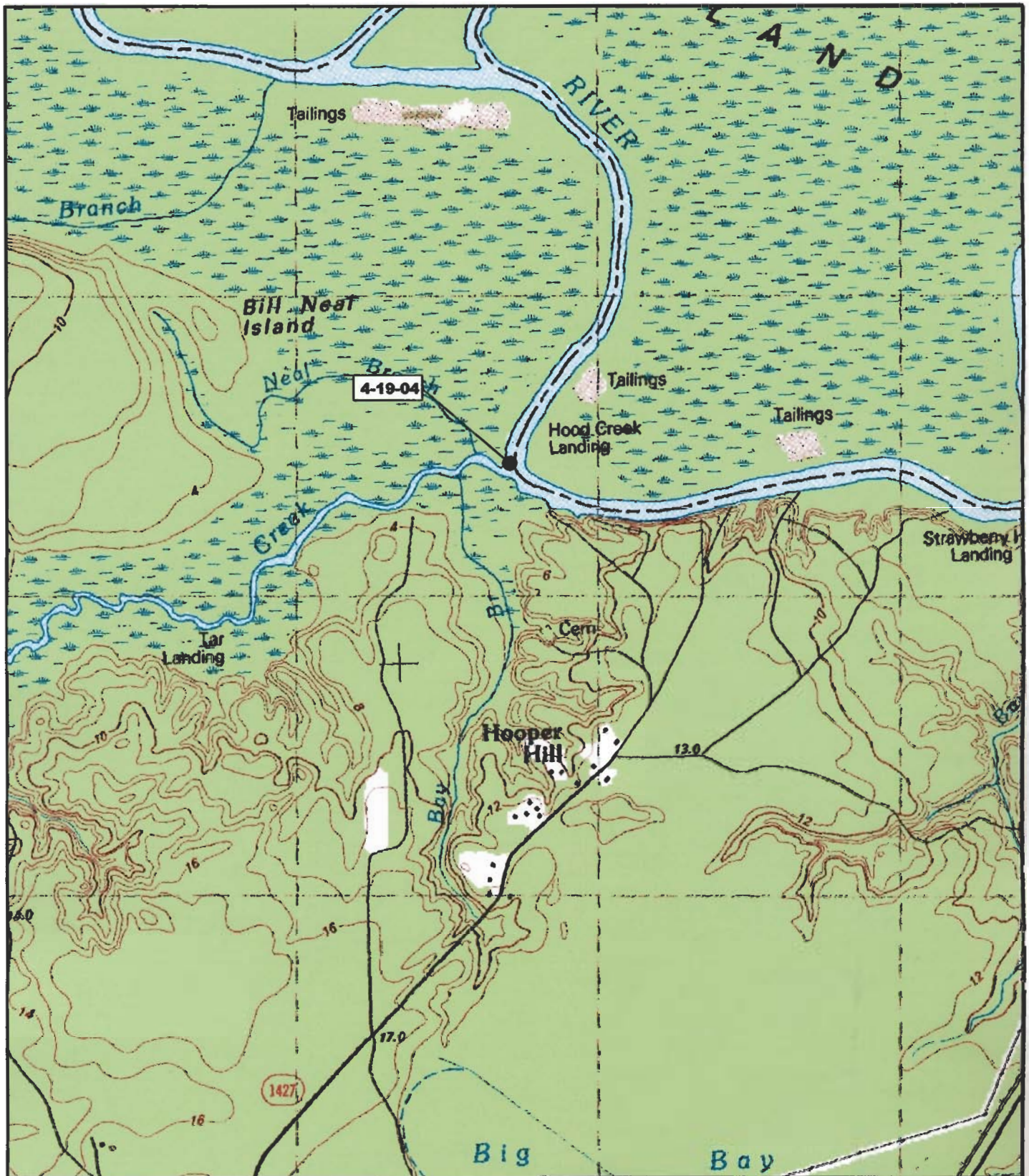


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 5





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5203

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/22/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5203-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8138

CP#1976.00

3 OF 5





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5203**

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5203-04

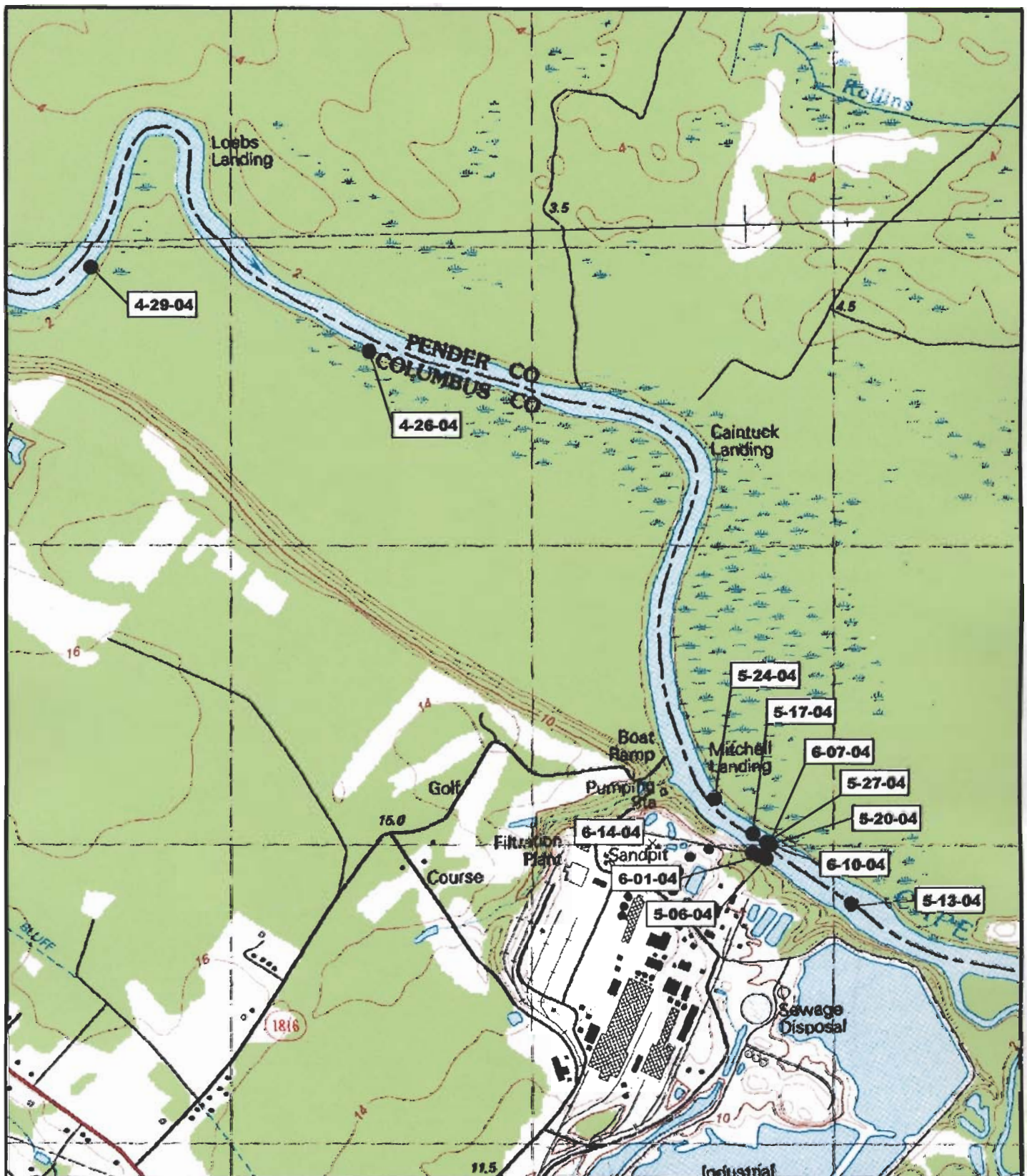


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-8253  
 FAX 910/392-9139

CP#1976.00

4 OF 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5203**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/15/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5203-04

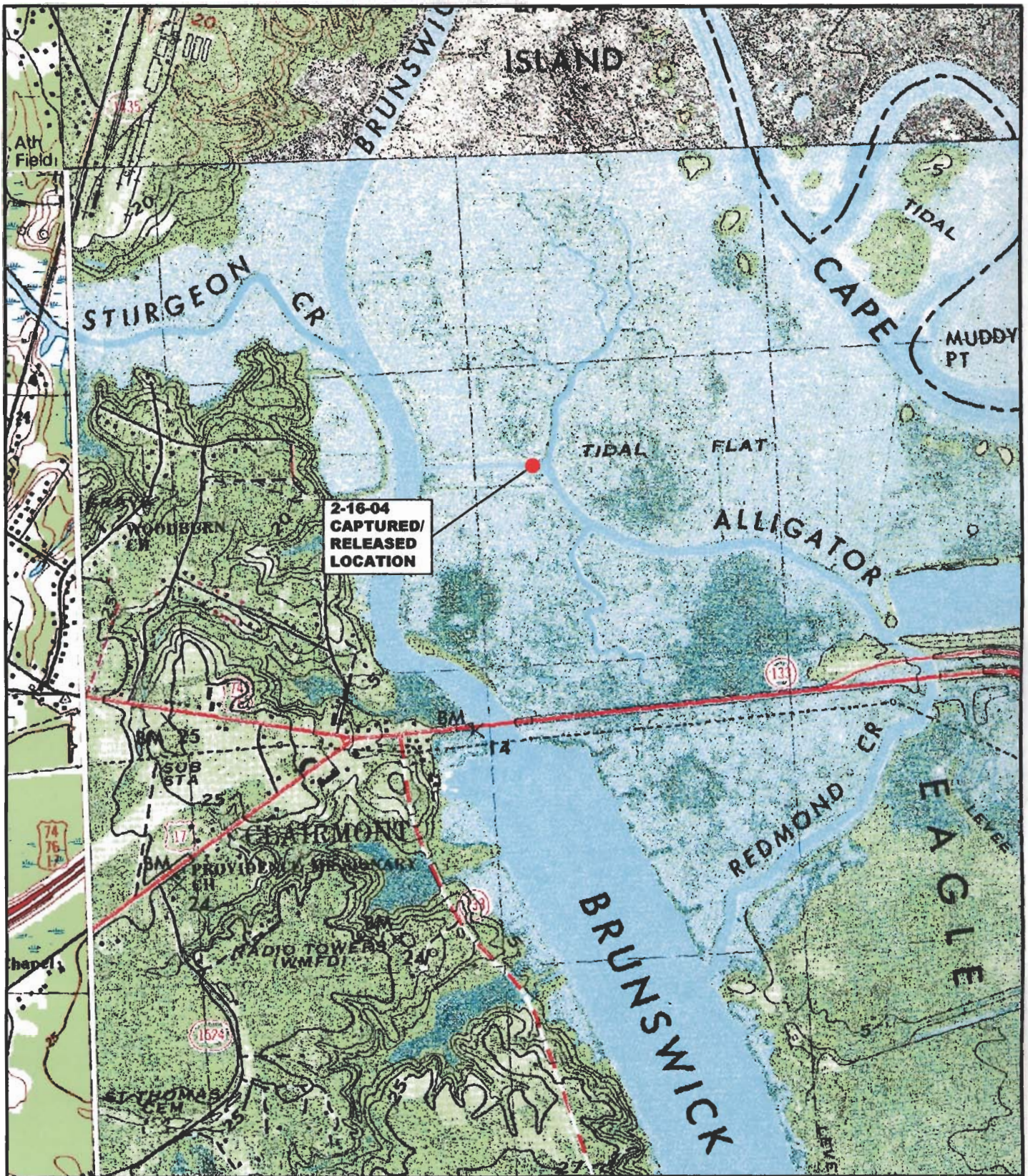


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

5 OF 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5204**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 7/22/04

APPROVED BY:

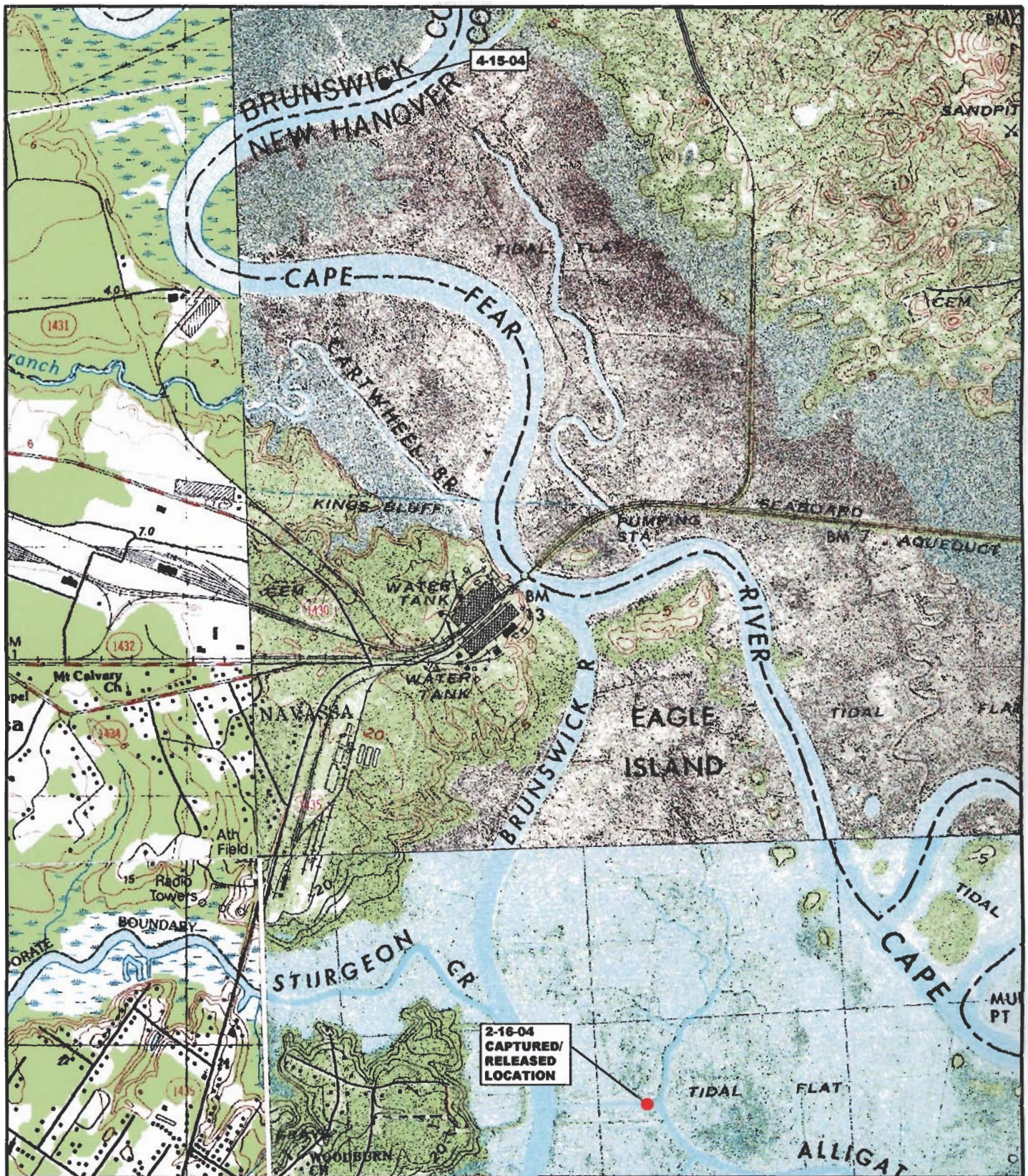
DRAWN BY: TLJ/TJB  
 FILE: CZR5204-04



4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1800 3600  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5205**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5205-04

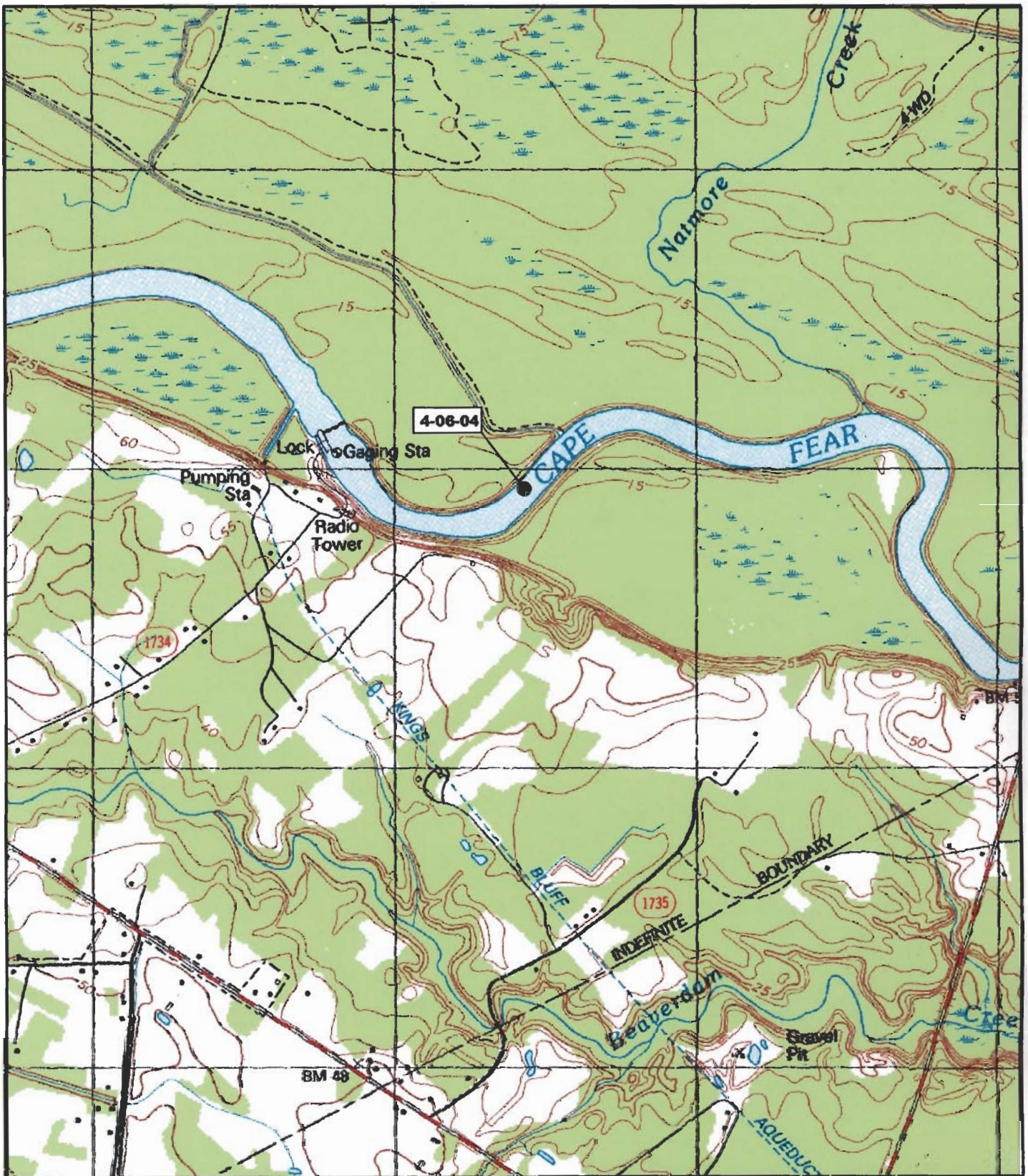


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5205**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY: [Signature]

DRAWN BY: TLJ/TJB  
FILE: CZR5205-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5206

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/22/04

FILE: CZR5206-04

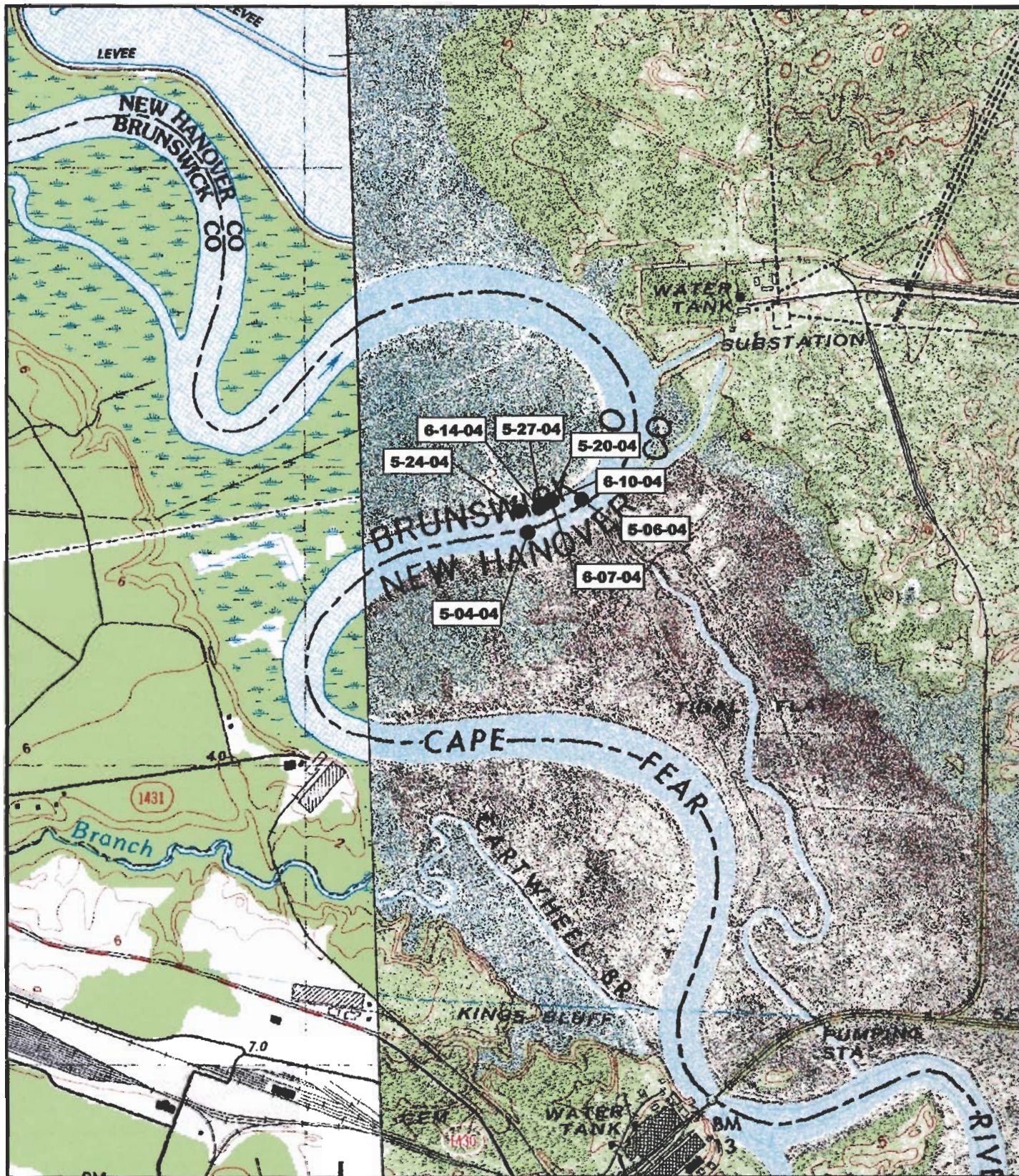


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5206

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5206-04

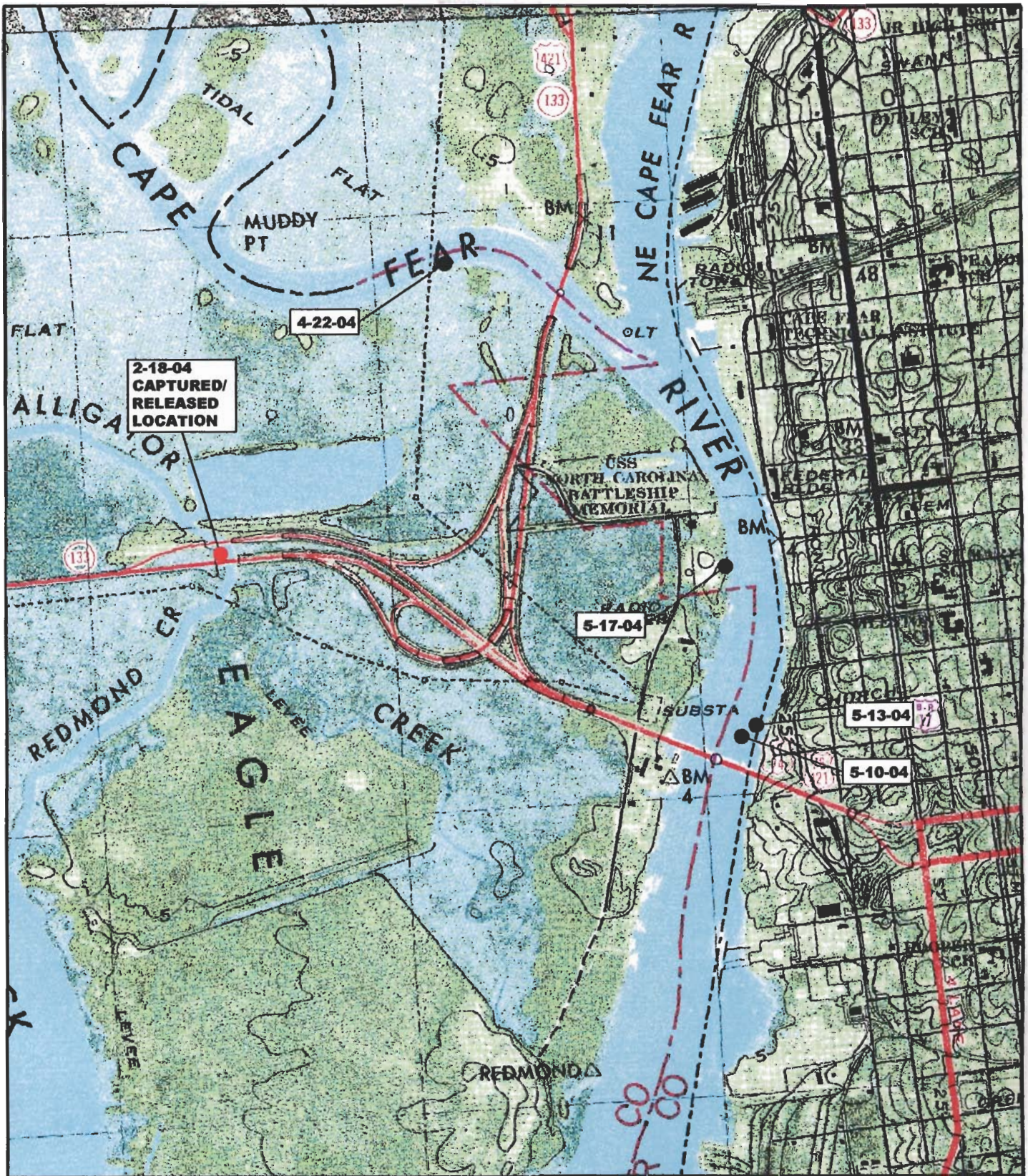


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5207

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 7/22/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5207-04

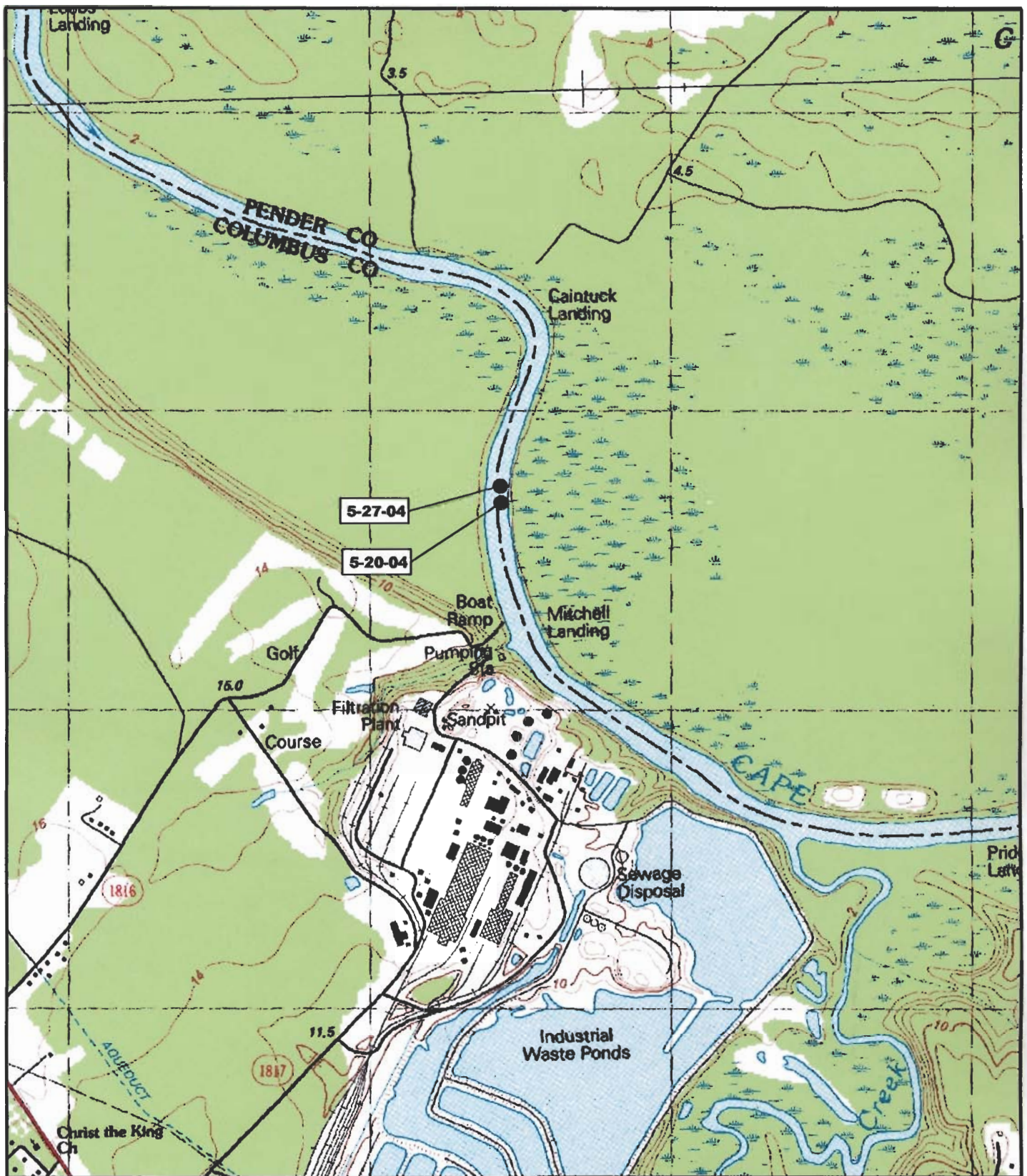


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5207**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/22/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5207-04

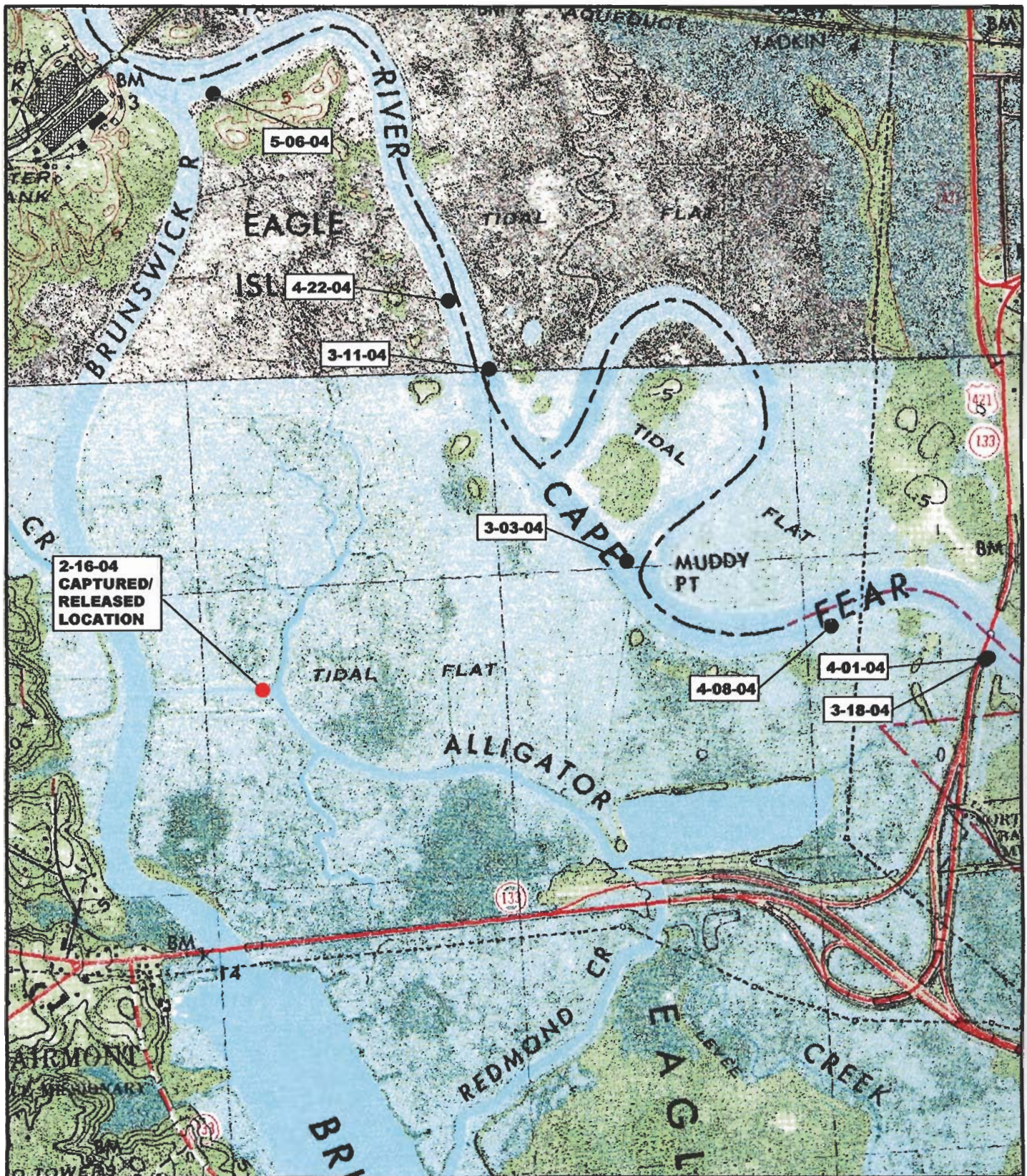


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5208

#### MANUAL FISH TRACKING DATA WILMINGTON USACE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5208-04

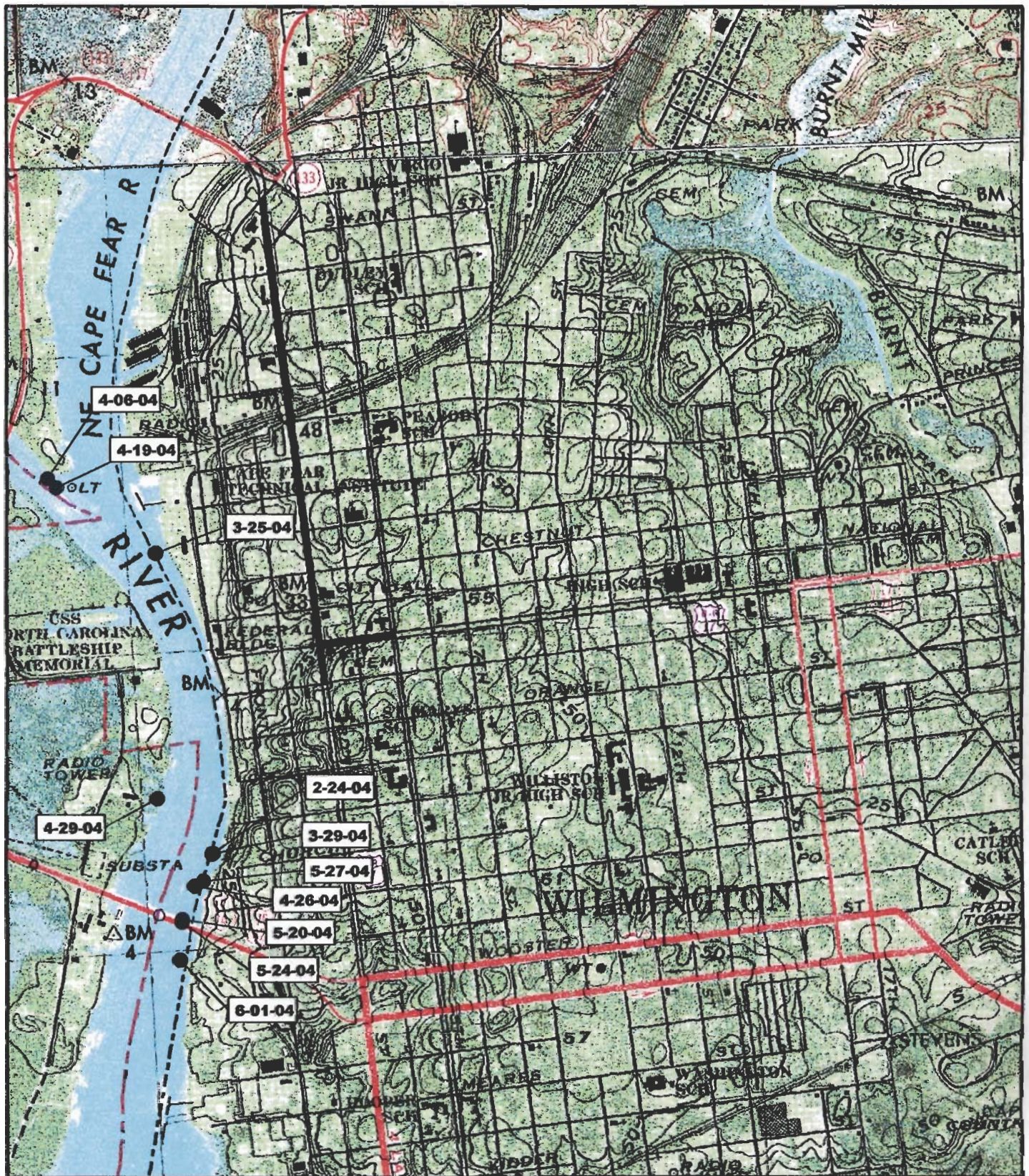


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5208

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5208-04

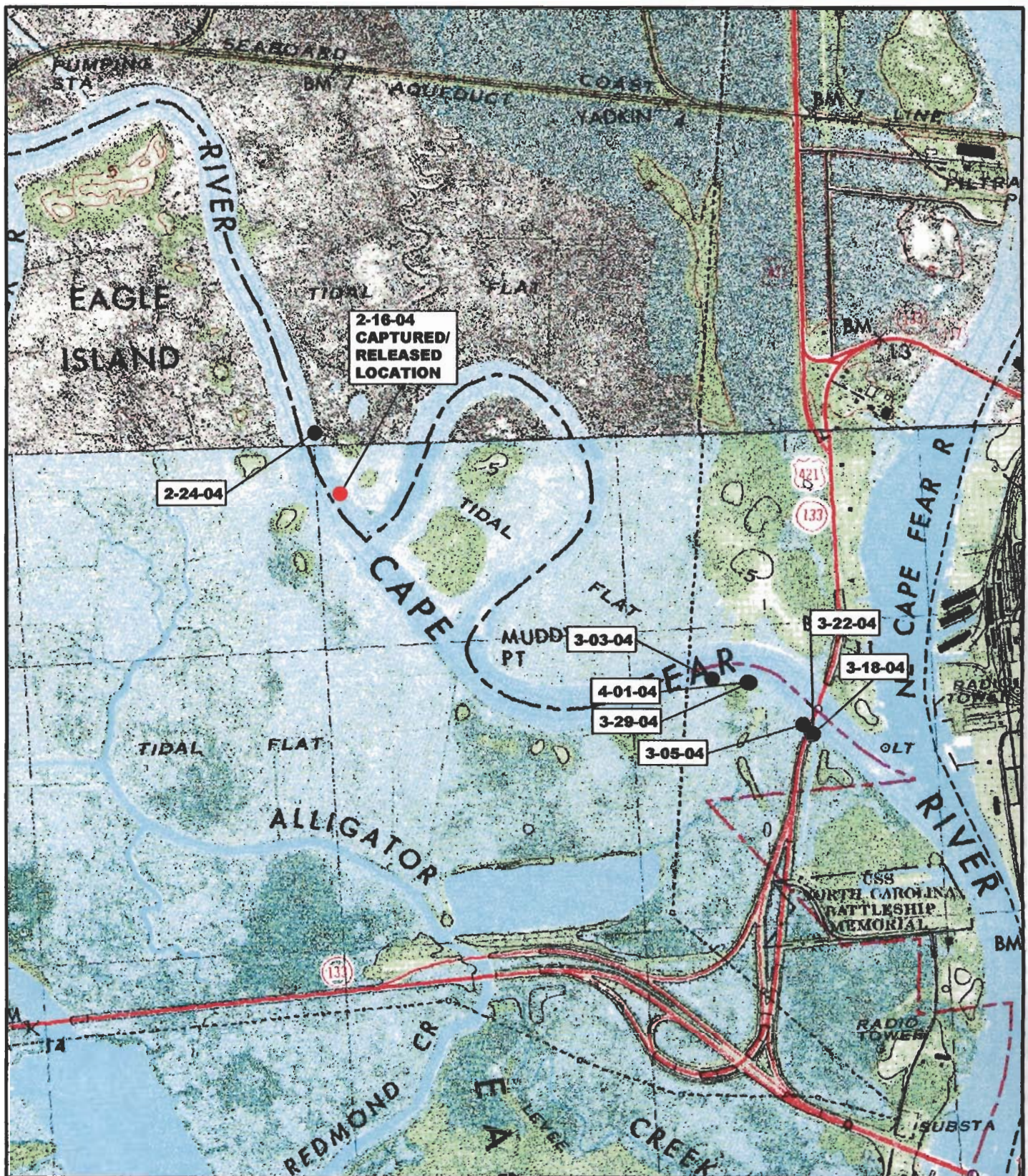


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5209

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 7/23/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5209-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

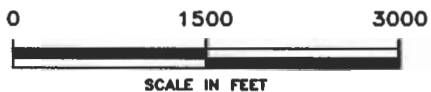
CP#1976.00

1 OF 2



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5209

**MANUAL FISH TRACKING DATA**  
**WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/23/04

FILE: CZR5209-04

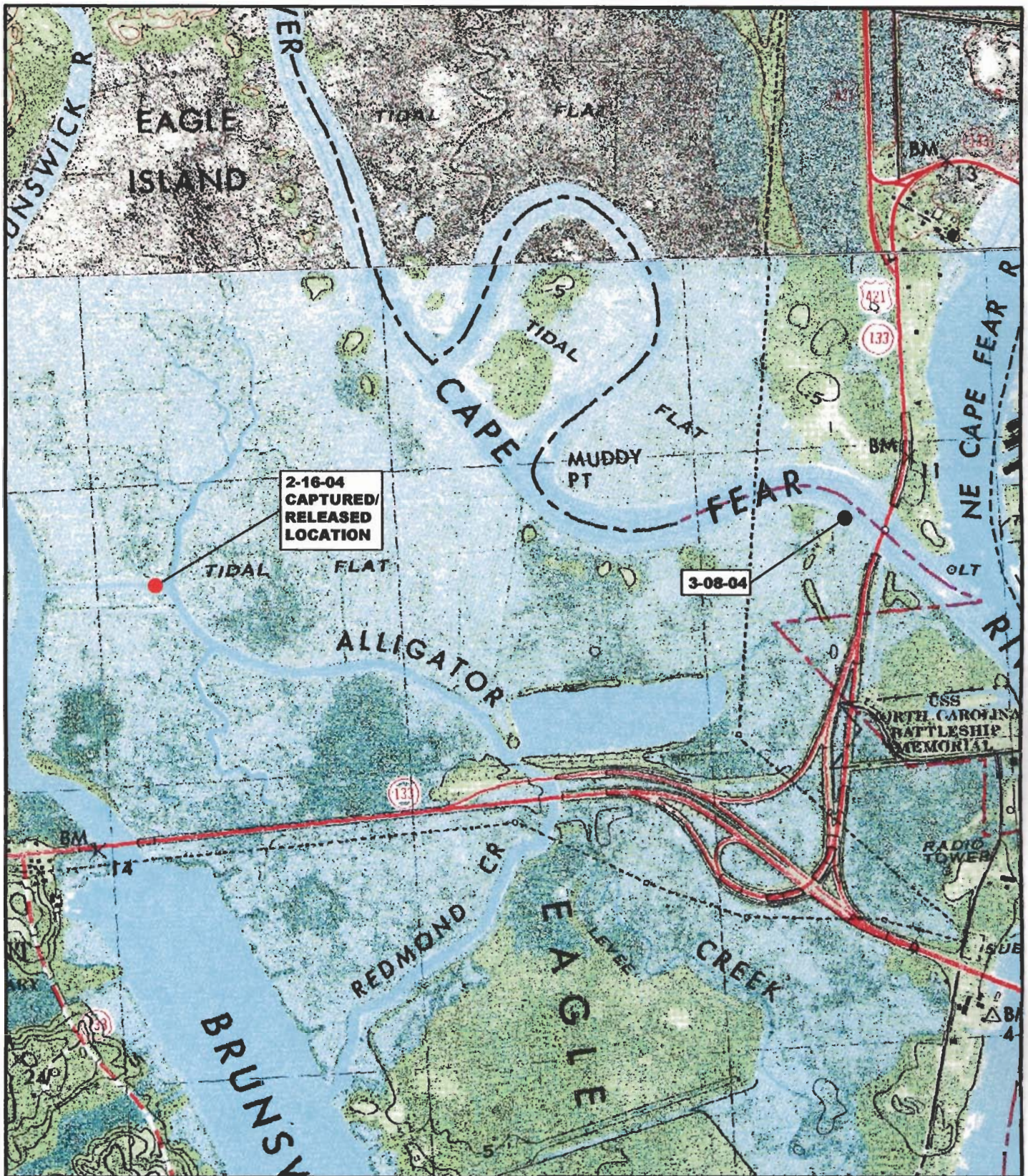


4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5210**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5210-04

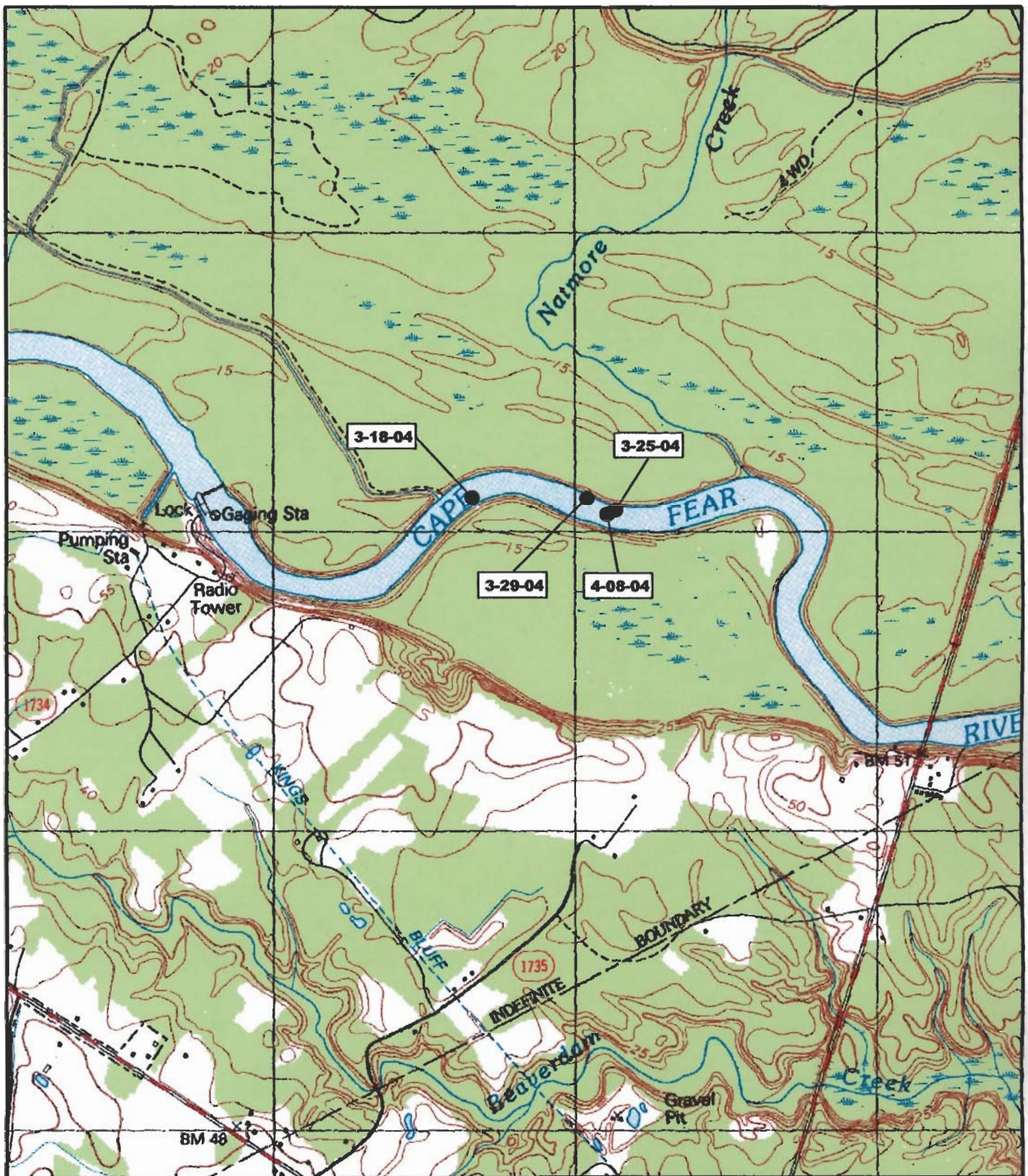


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9255  
 FAX 910/392-9139

CP#1976.00

1 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5210

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5210-04

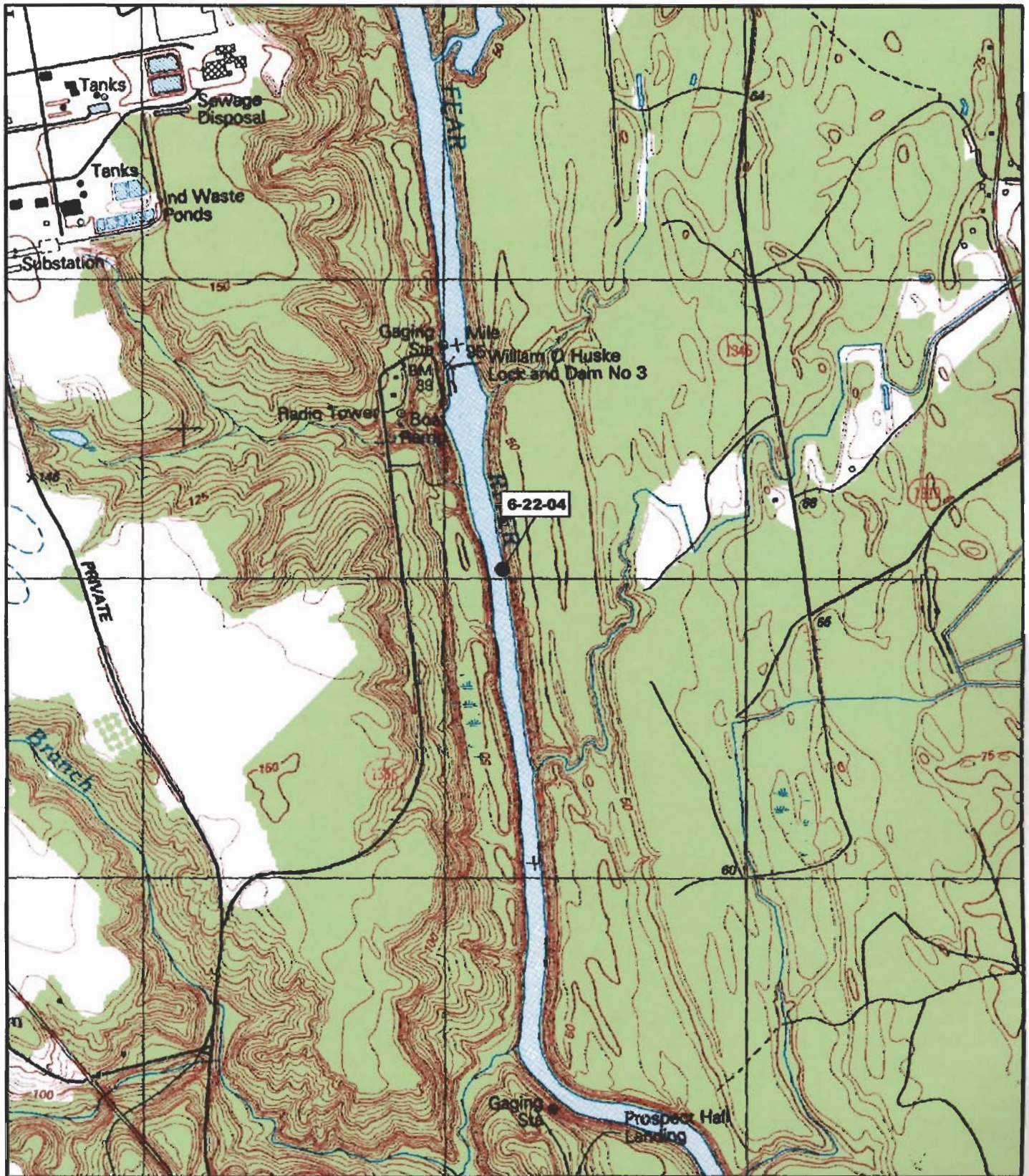


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5210**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5210-04

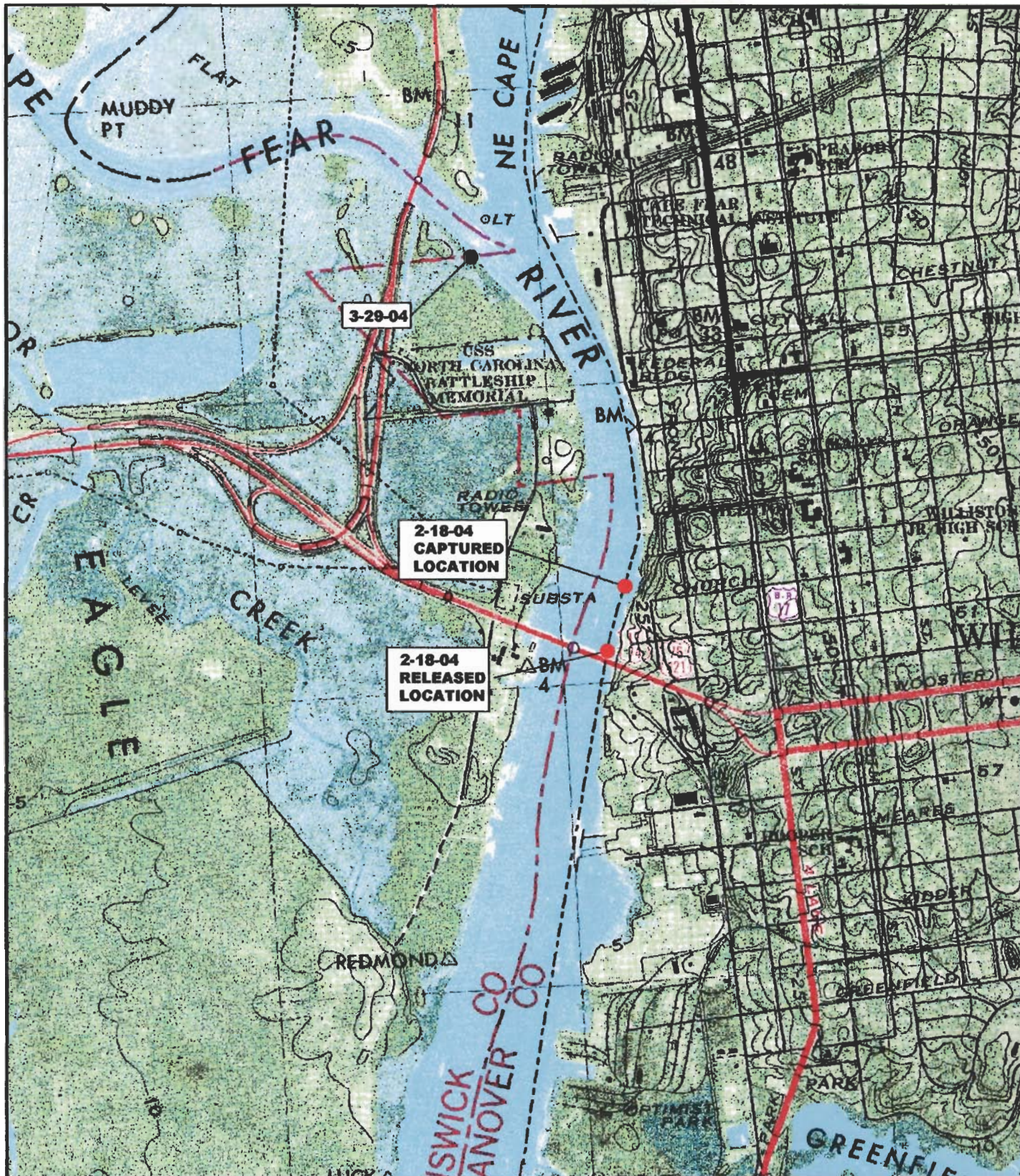


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00

3 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5211**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/23/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5211-04

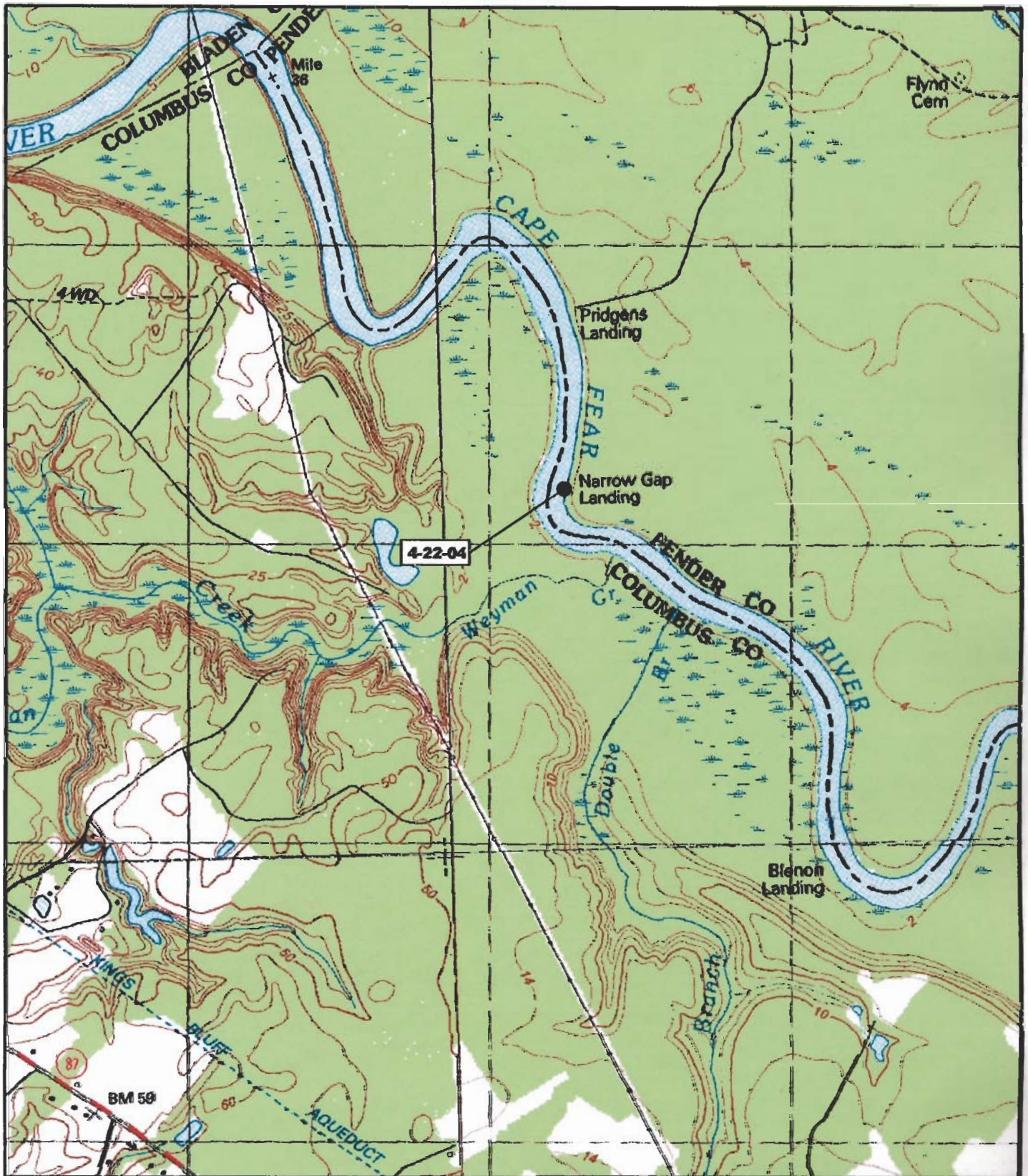


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5211**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/23/04

FILE: CZR5211-04

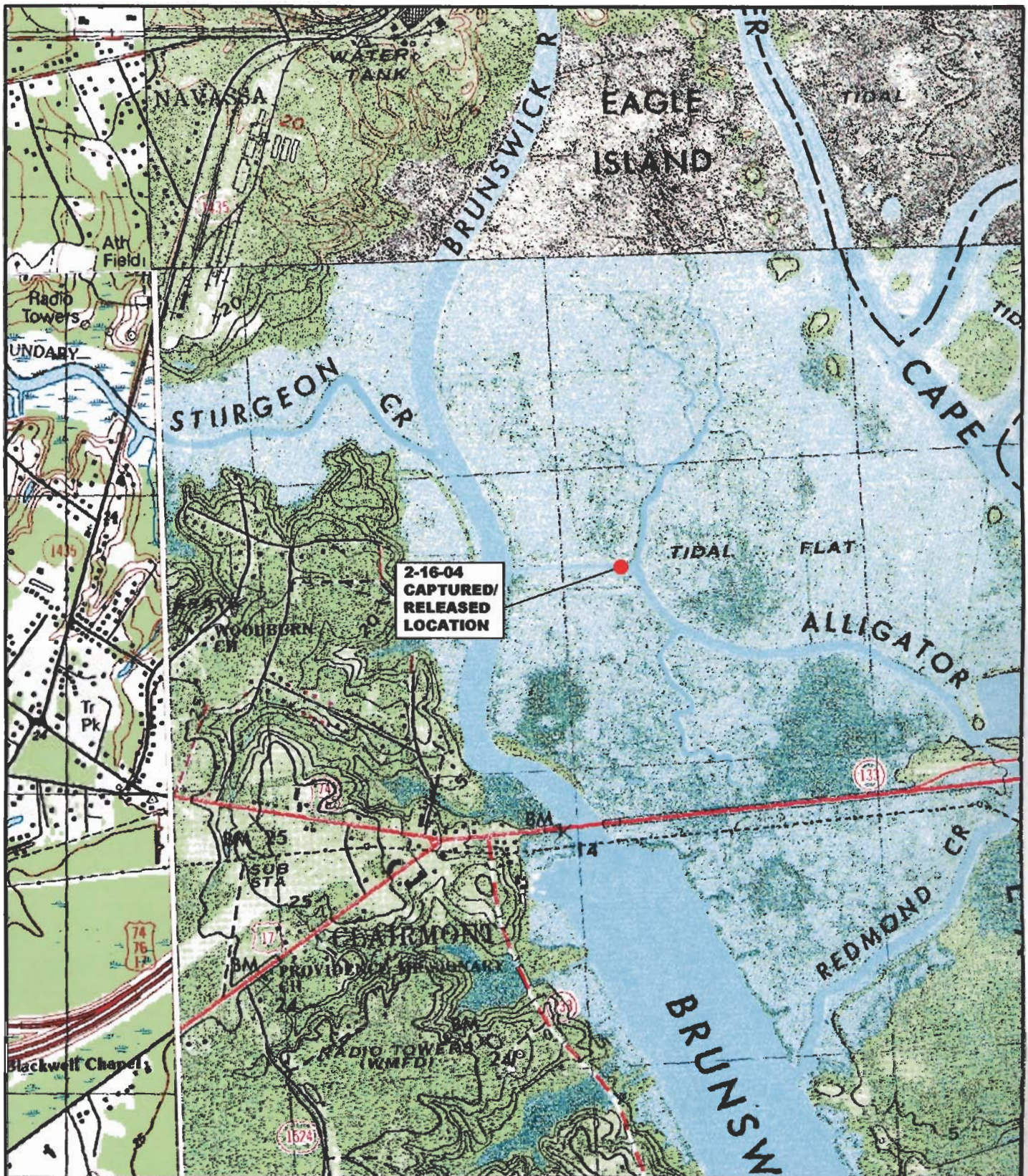


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5212**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5212-04

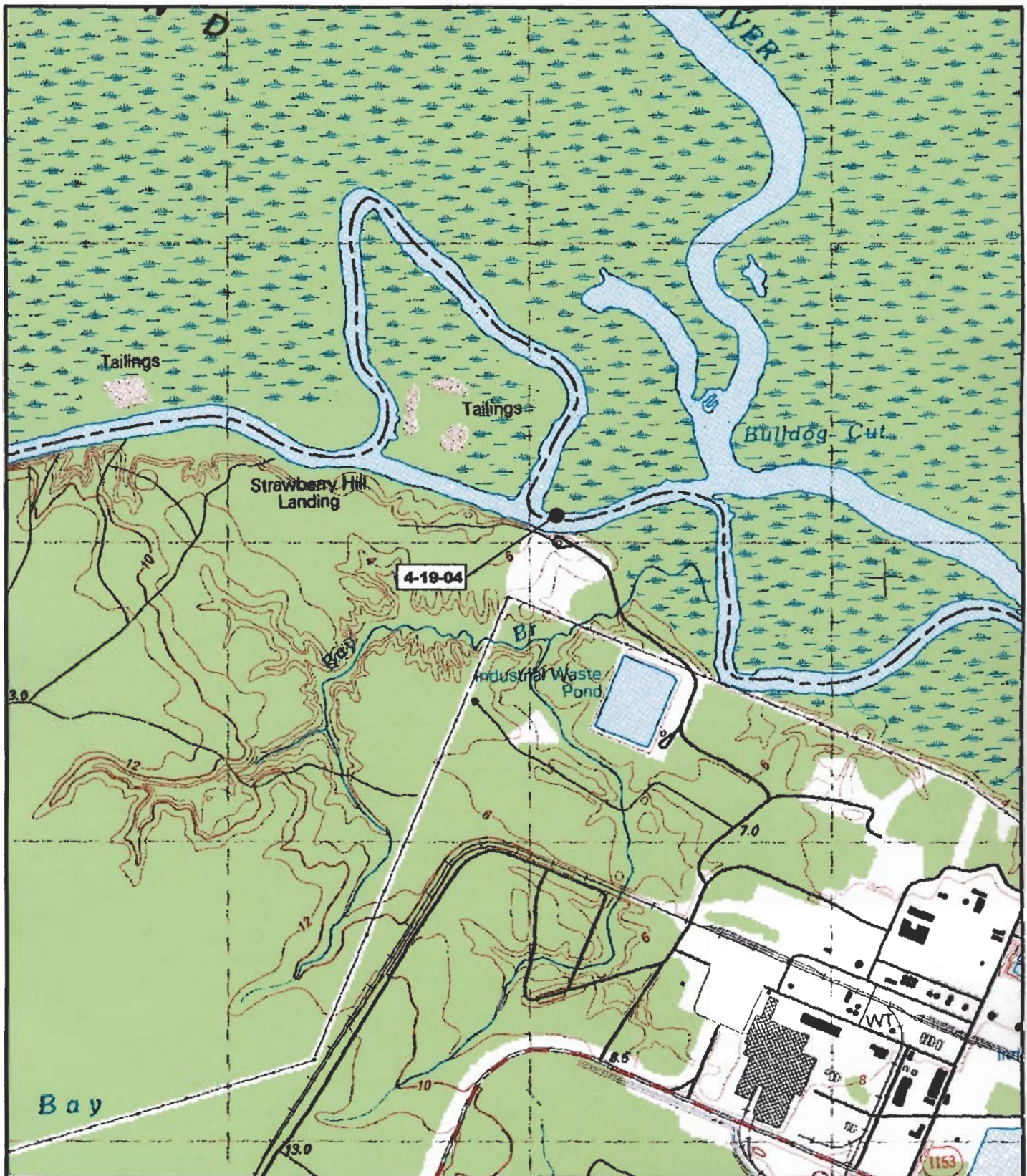


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5212**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: TLJ/TJB
DATE: 7/23/04		FILE: CZR5212-04

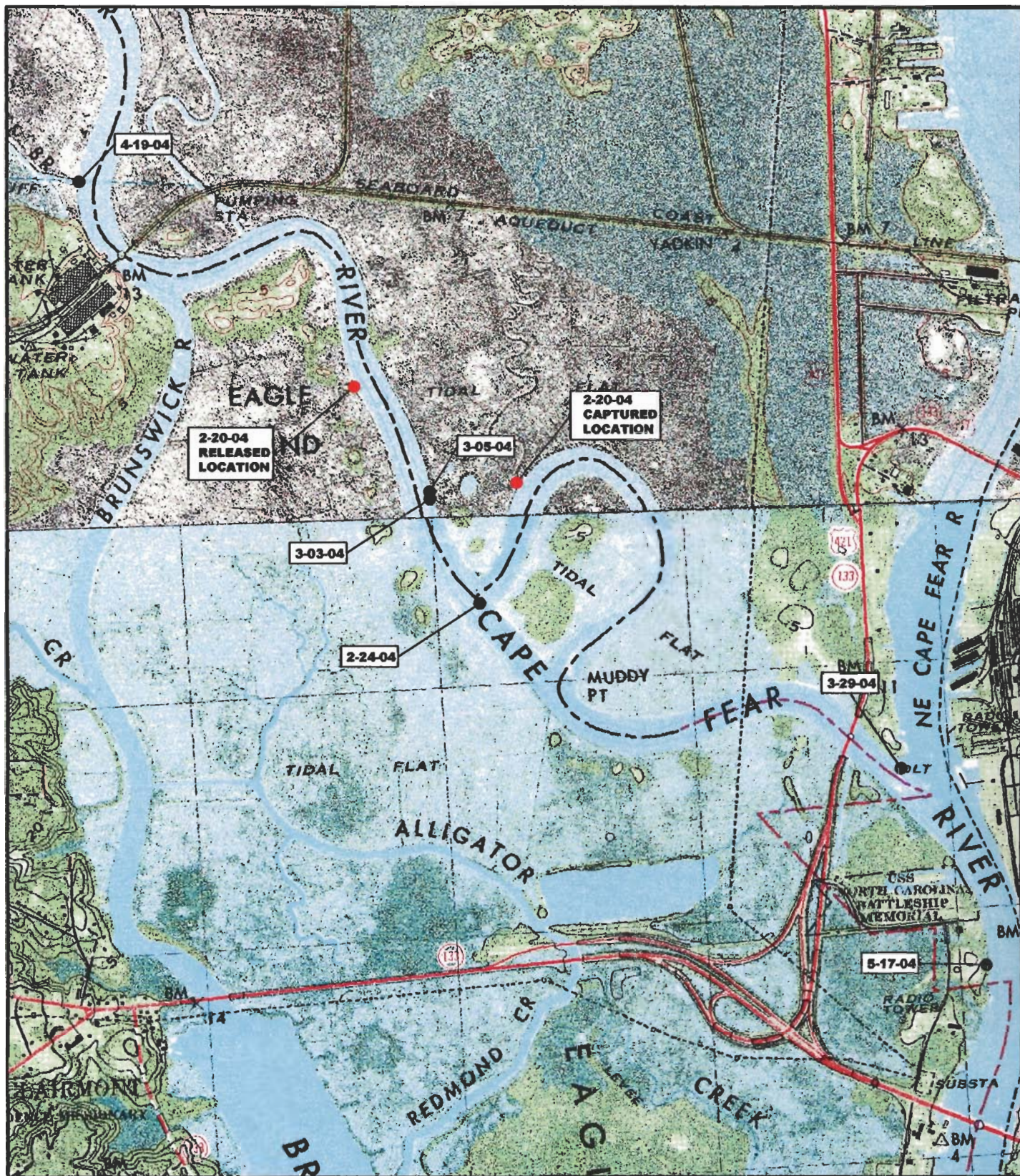


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

**CP#1976.00**

**2 OF 2**





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1800 3600  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5213

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5213-04

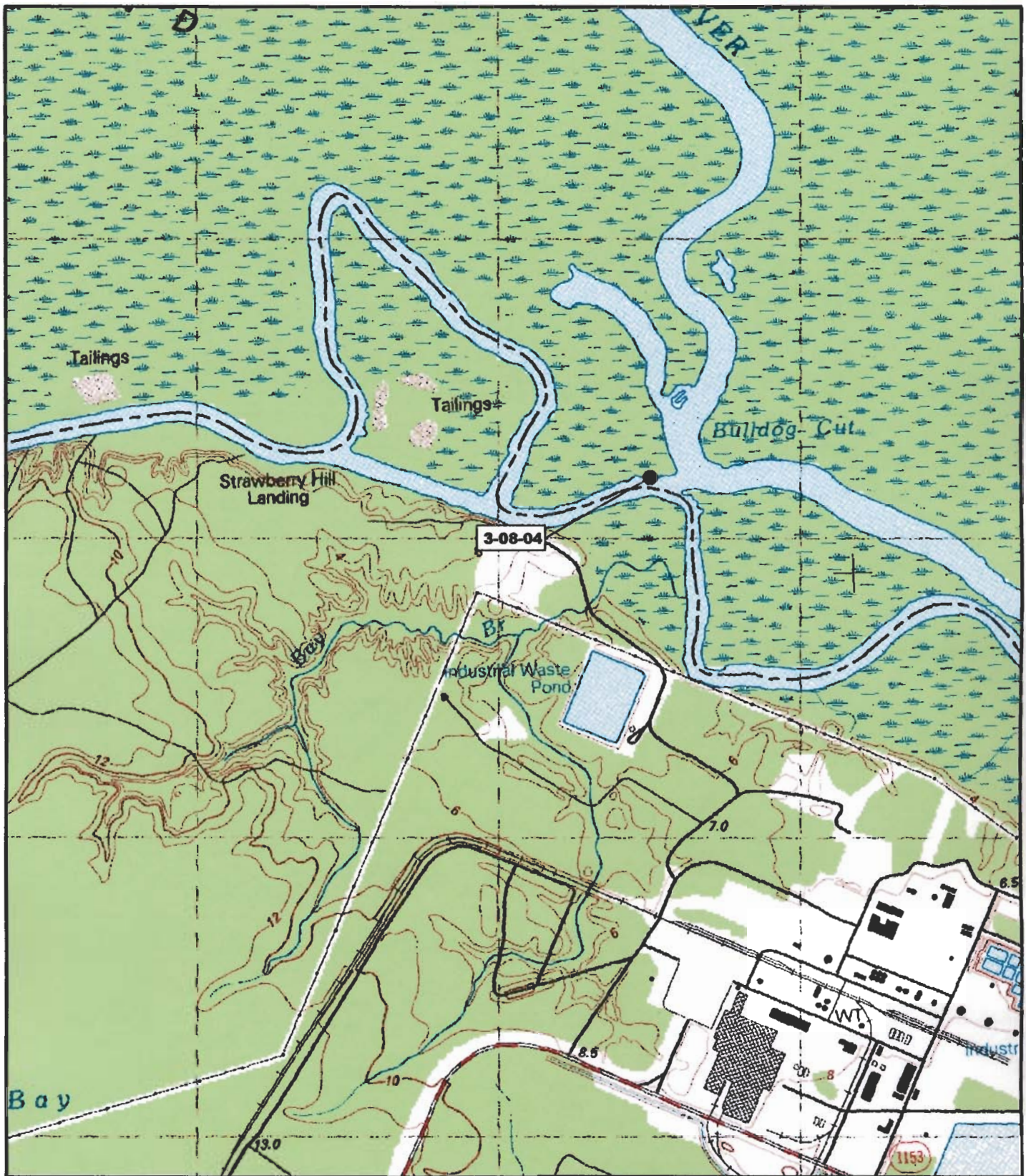


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 5





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5213

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5213-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5213**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/15/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5213-04

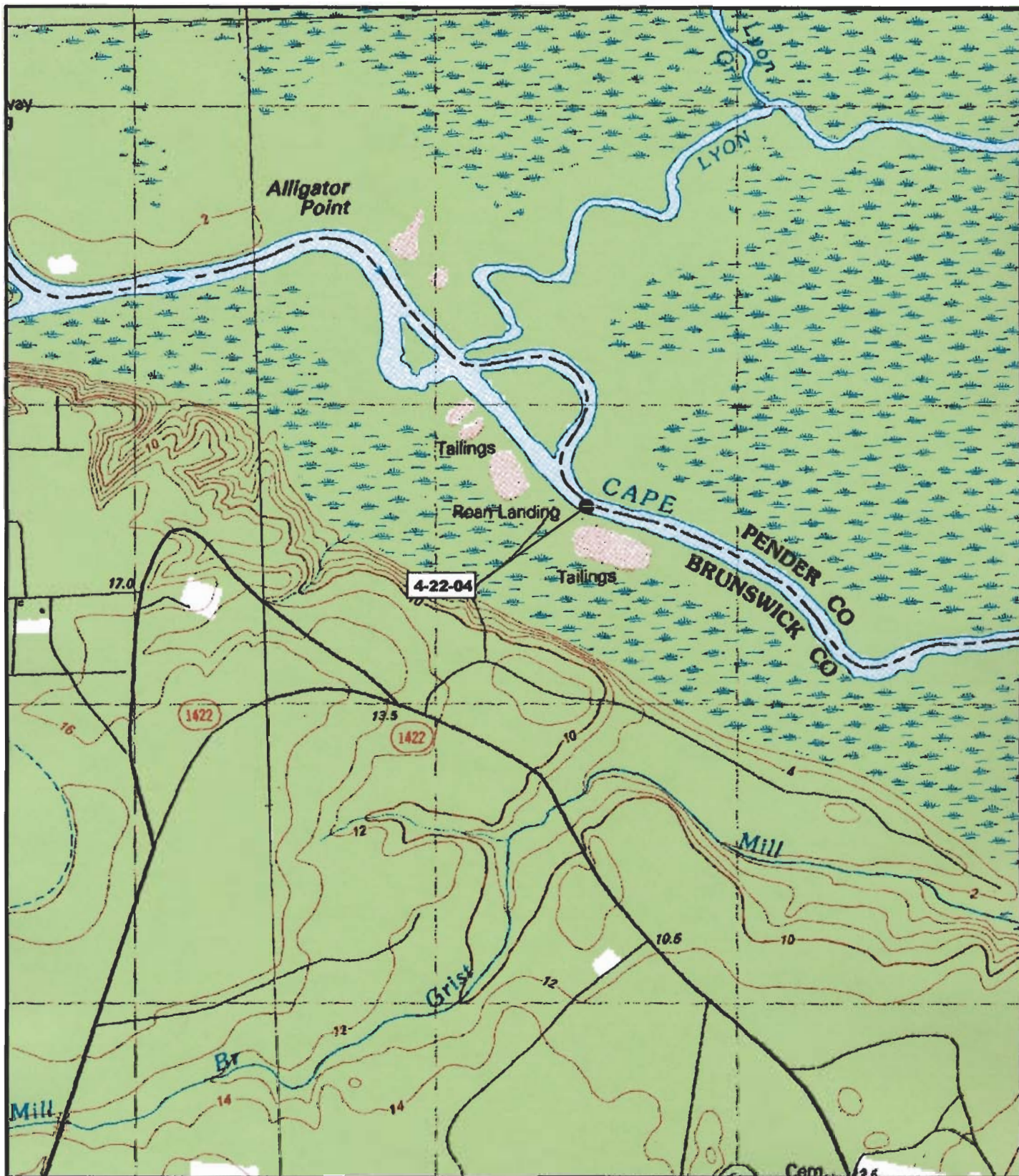


4708 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

3 OF 5





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5213

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/15/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5213-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9159

CP#1976.00

4 OF 5



### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**



SITE OF RELOCATED STRIPED BASS  
CZR5213

**MANUAL FISH TRACKING DATA**  
**WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/15/04

FILE: CZR5213-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

5 of 5





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5214**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: TLJ/TJB
DATE: 7/26/04		FILE: CZR5214-04

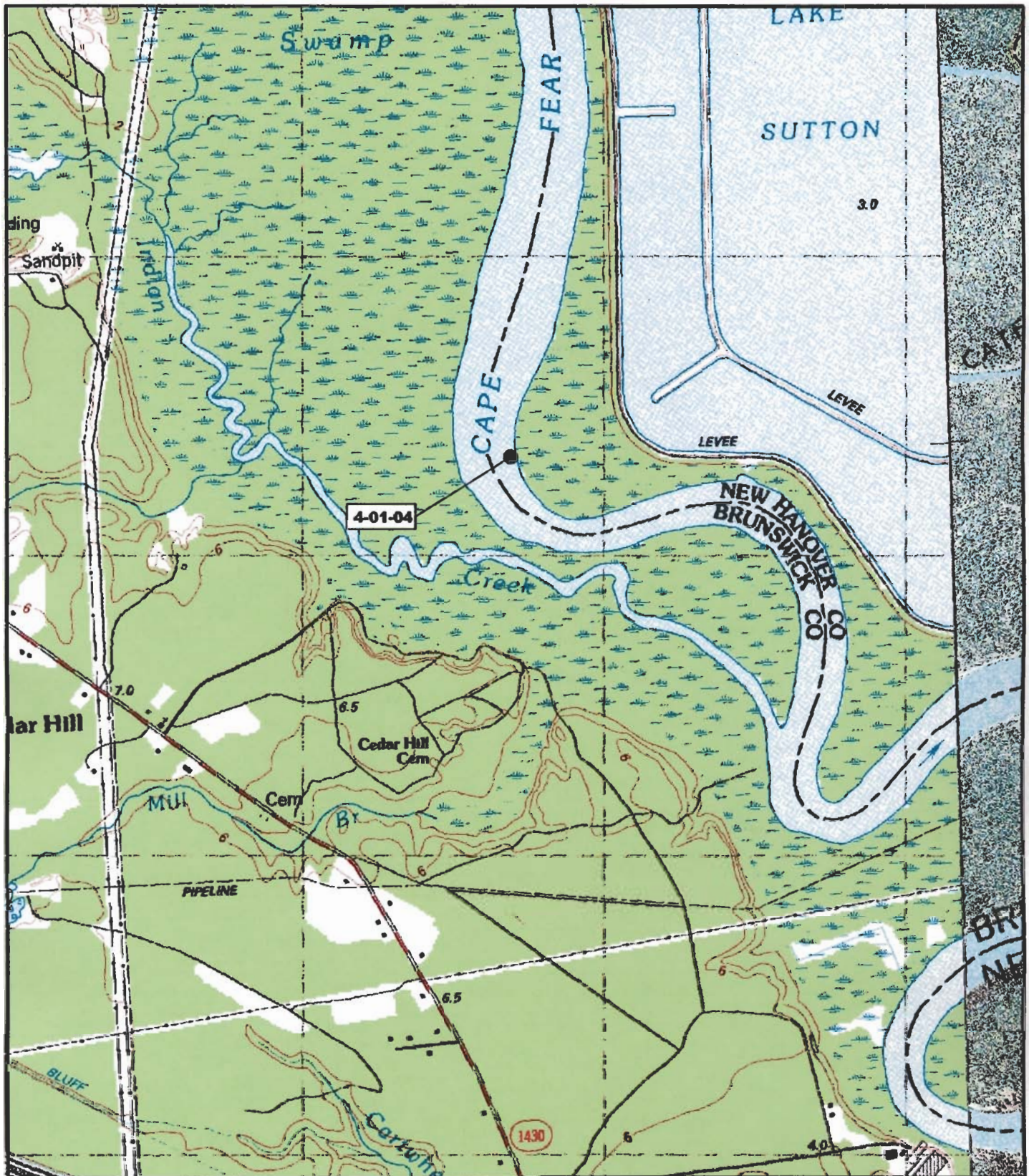


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00

1 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5214**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 7/26/04

APPROVED BY:

*[Signature]*

DRAWN BY: MLJ/TJB

FILE: CZR5214-04

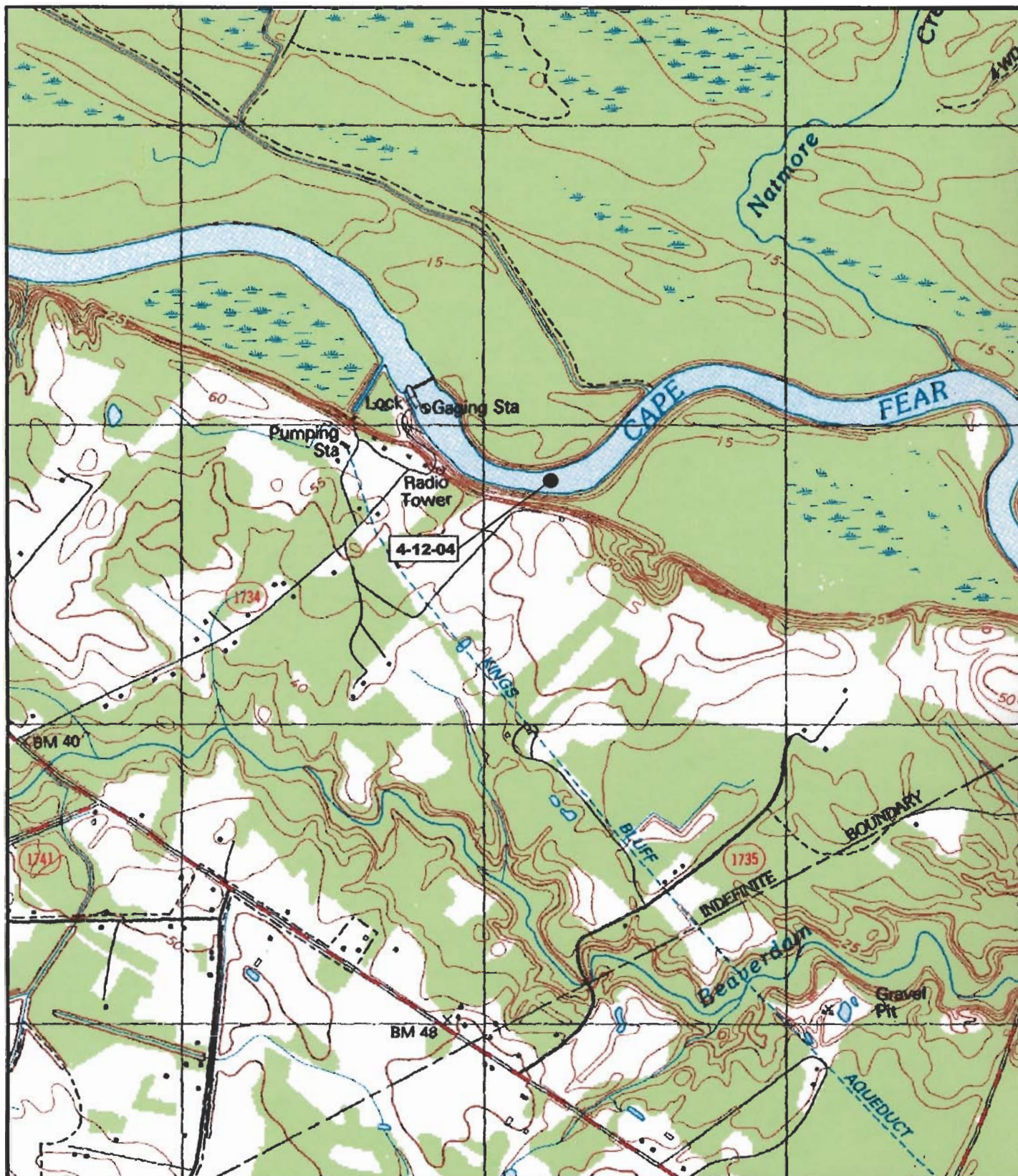


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5214**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 7/26/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5214-04

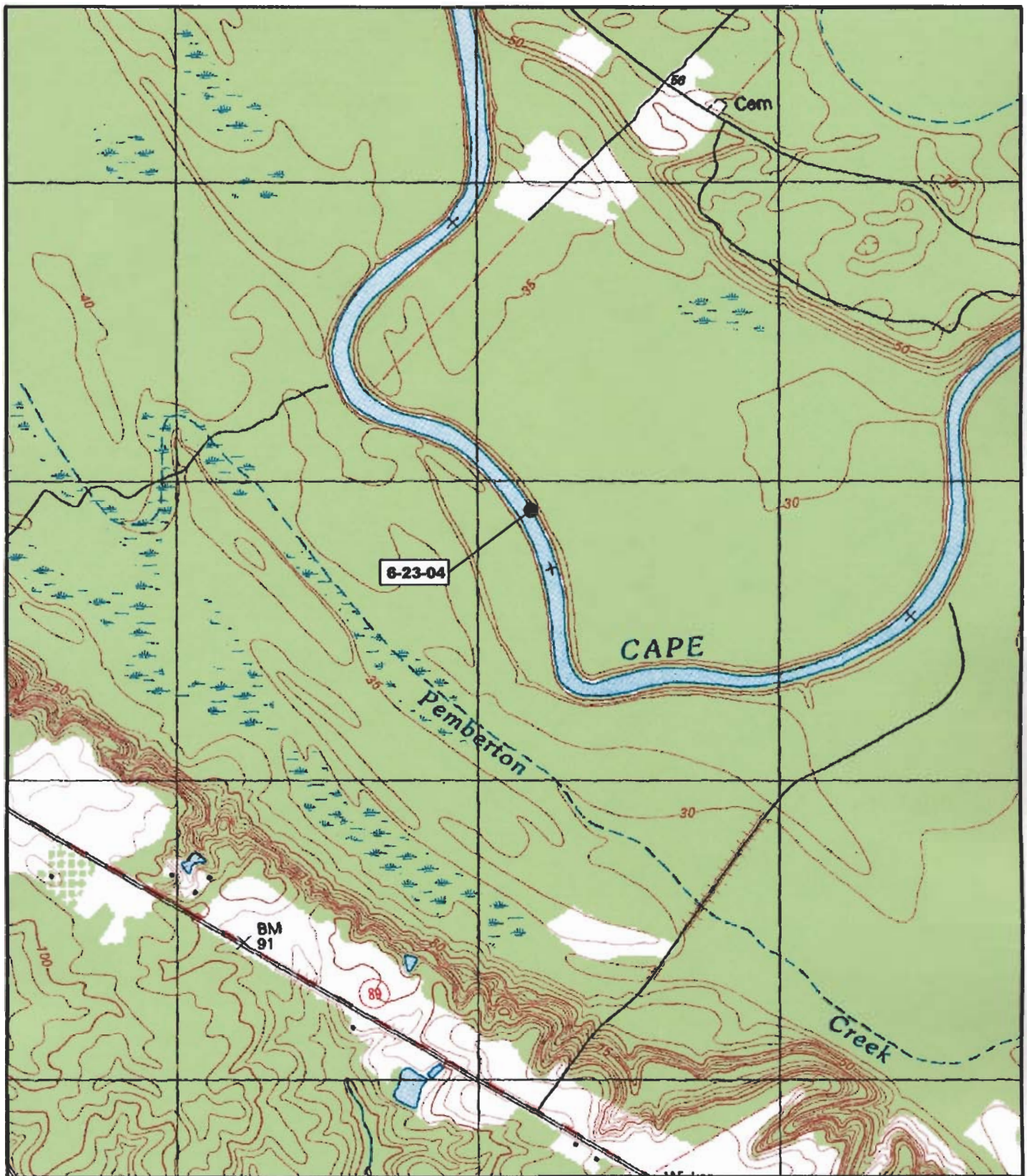


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5214**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/26/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5214-04

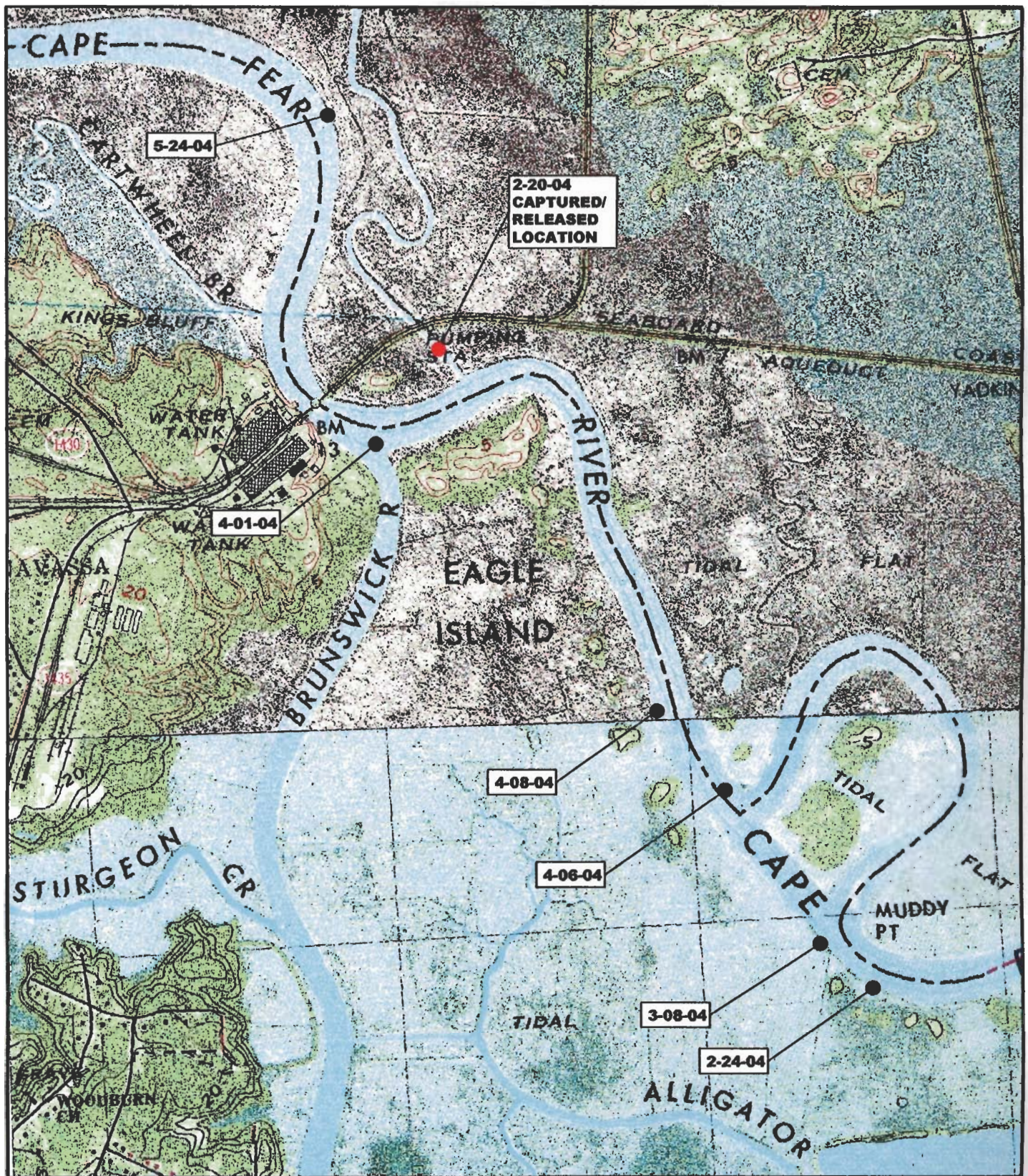


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 OF 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5215

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 7/28/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5215-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5215

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 7/28/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5215-04

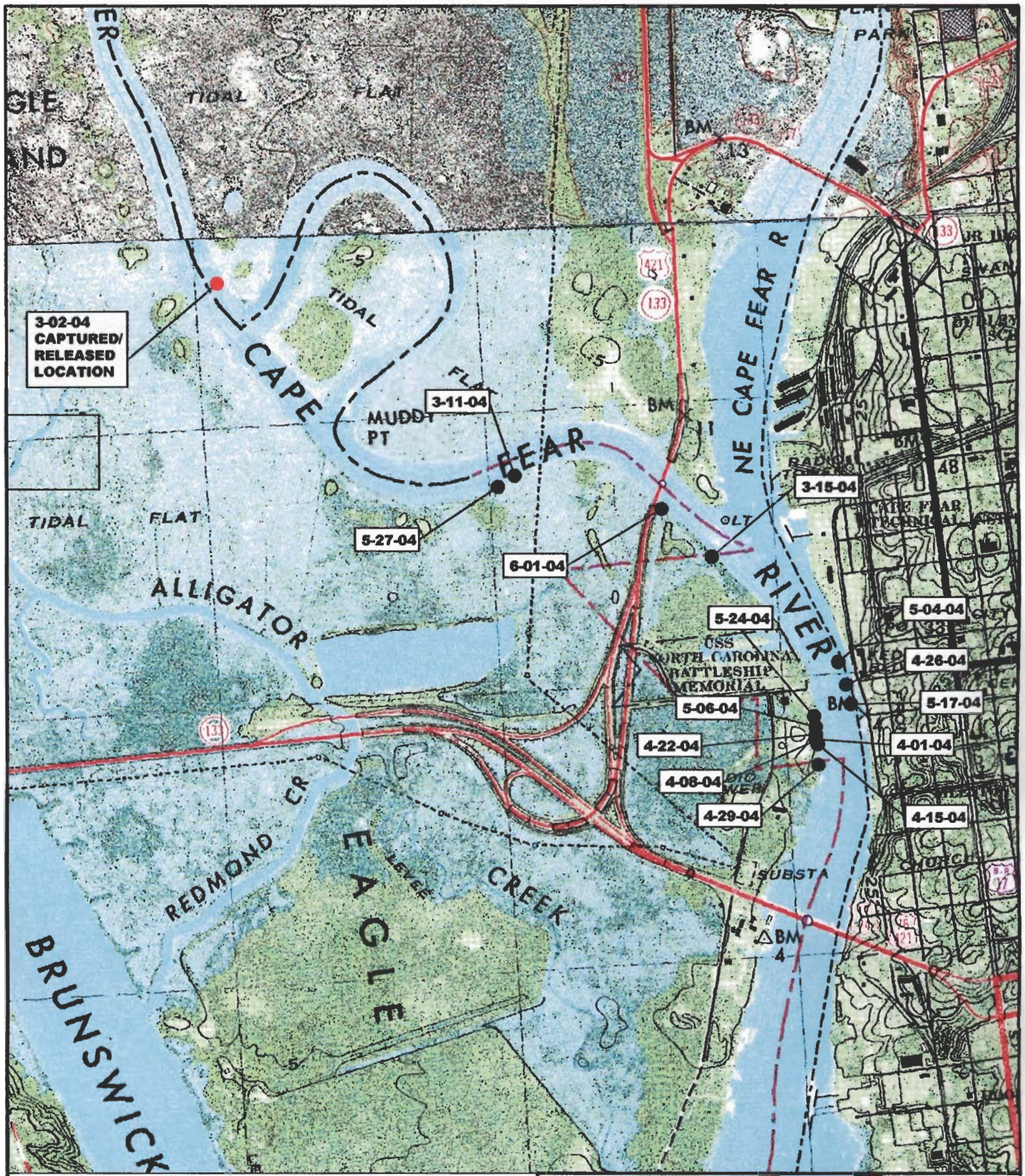


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH



SITE OF RELOCATED STRIPED BASS  
CZR5216

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5216-04

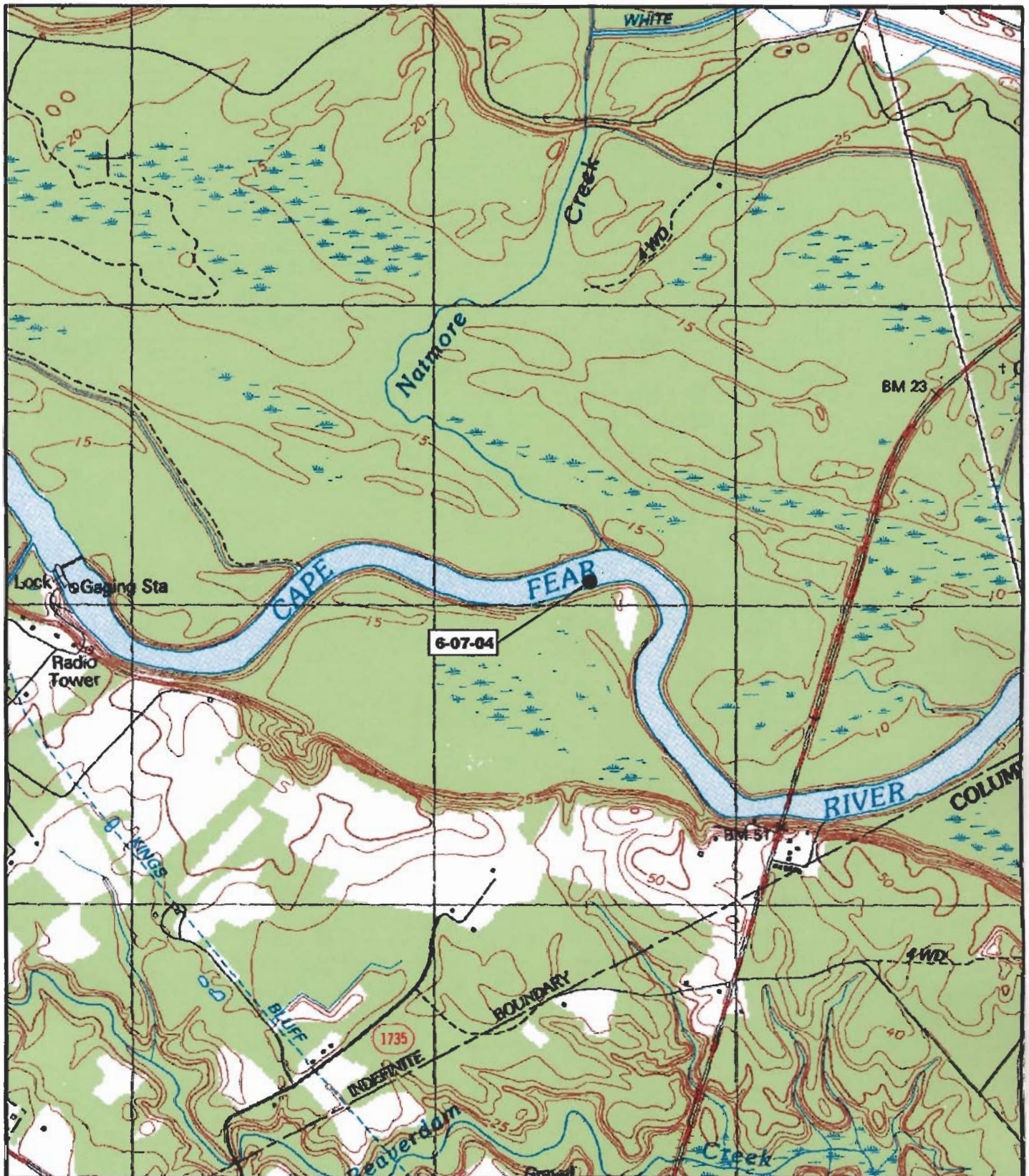


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8139

CP#1976.00

1 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5216**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/17/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5216-04

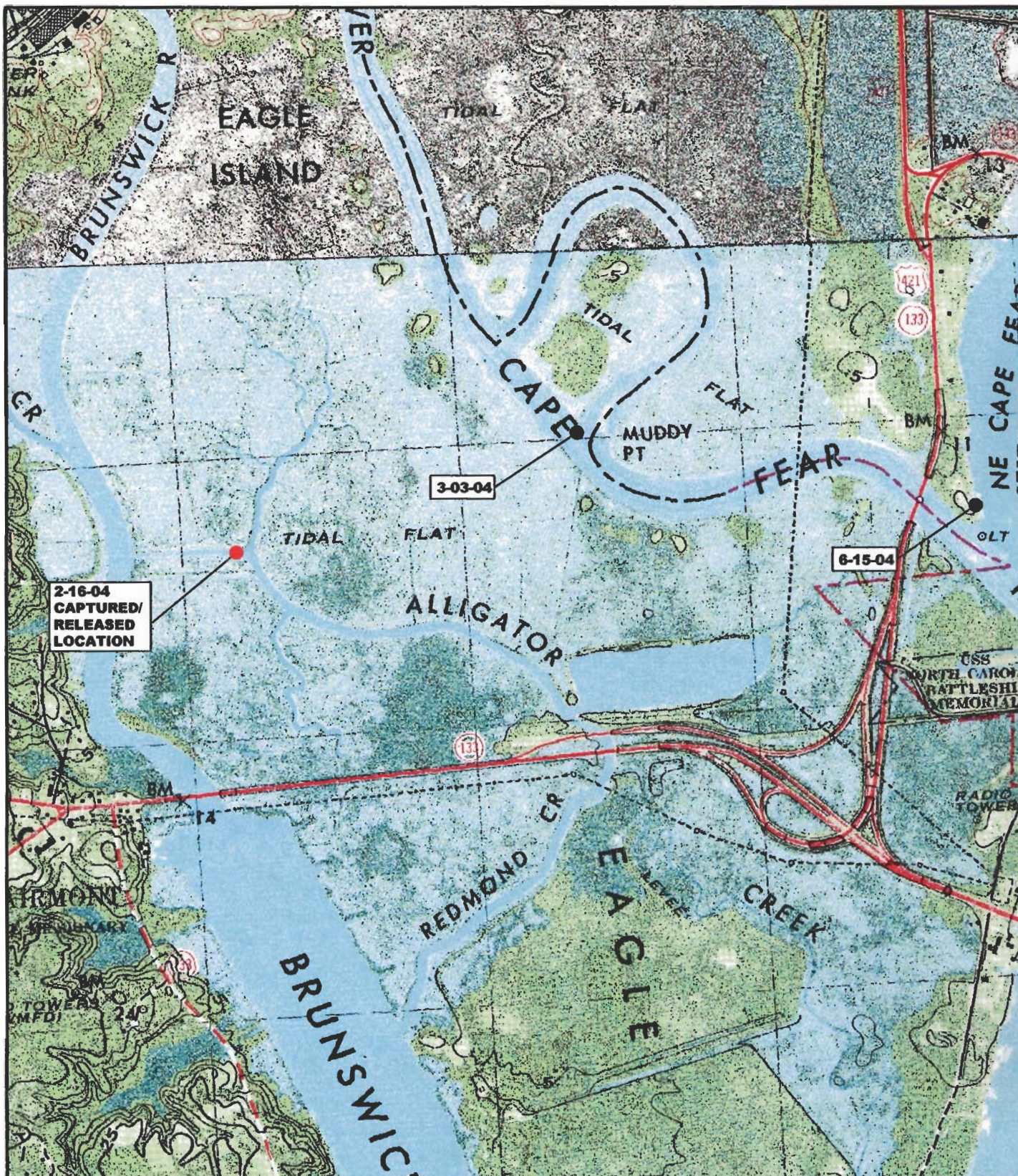


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5217

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/30/04

FILE: CZR5217-04

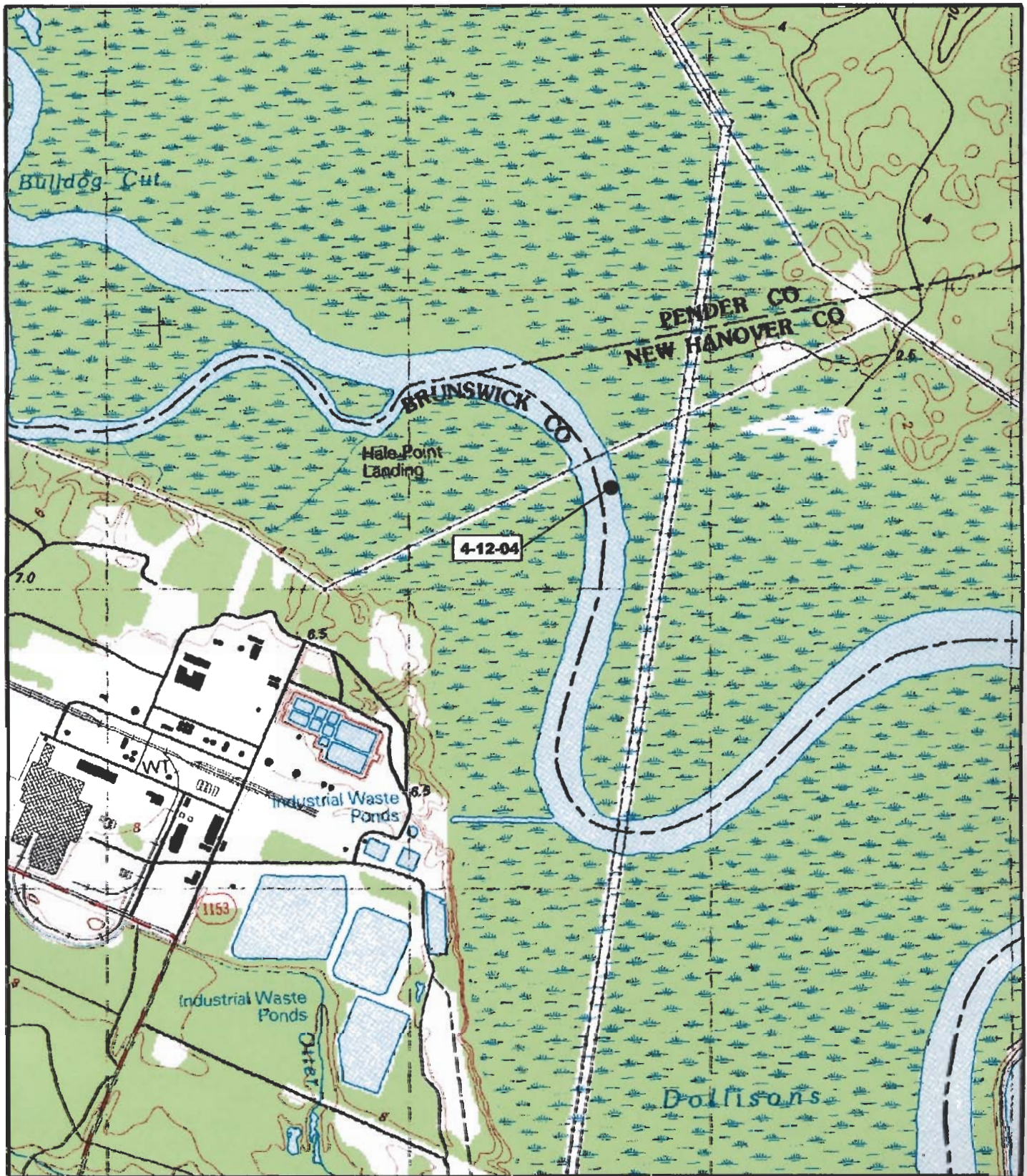


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5217**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 7/30/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
 FILE: CZR5217-04

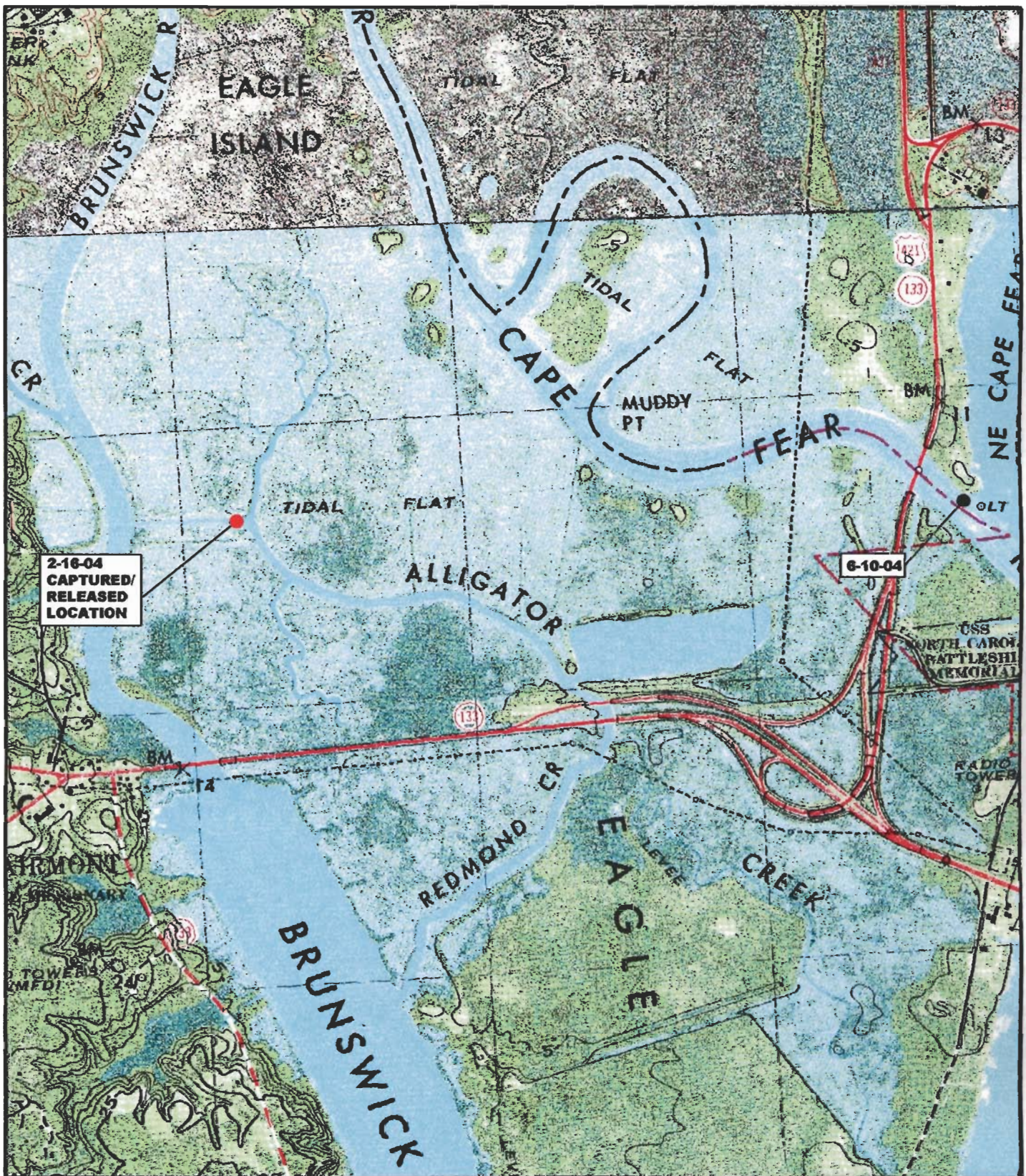


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5218

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 7/30/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5218-04

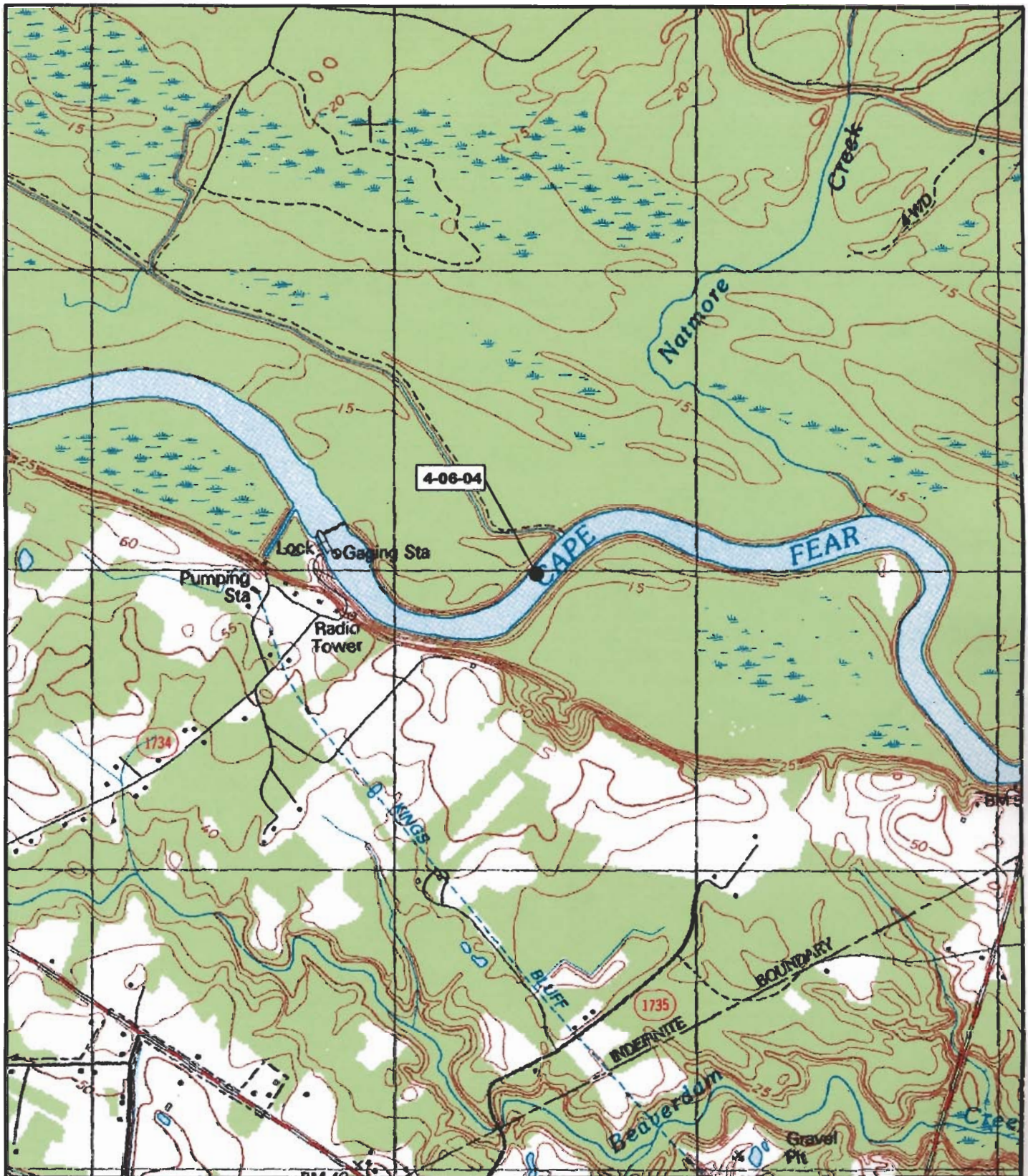


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5218**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 7/30/04

APPROVED BY:

DRAWN BY: TJS/TJB

FILE: CZR5218-04

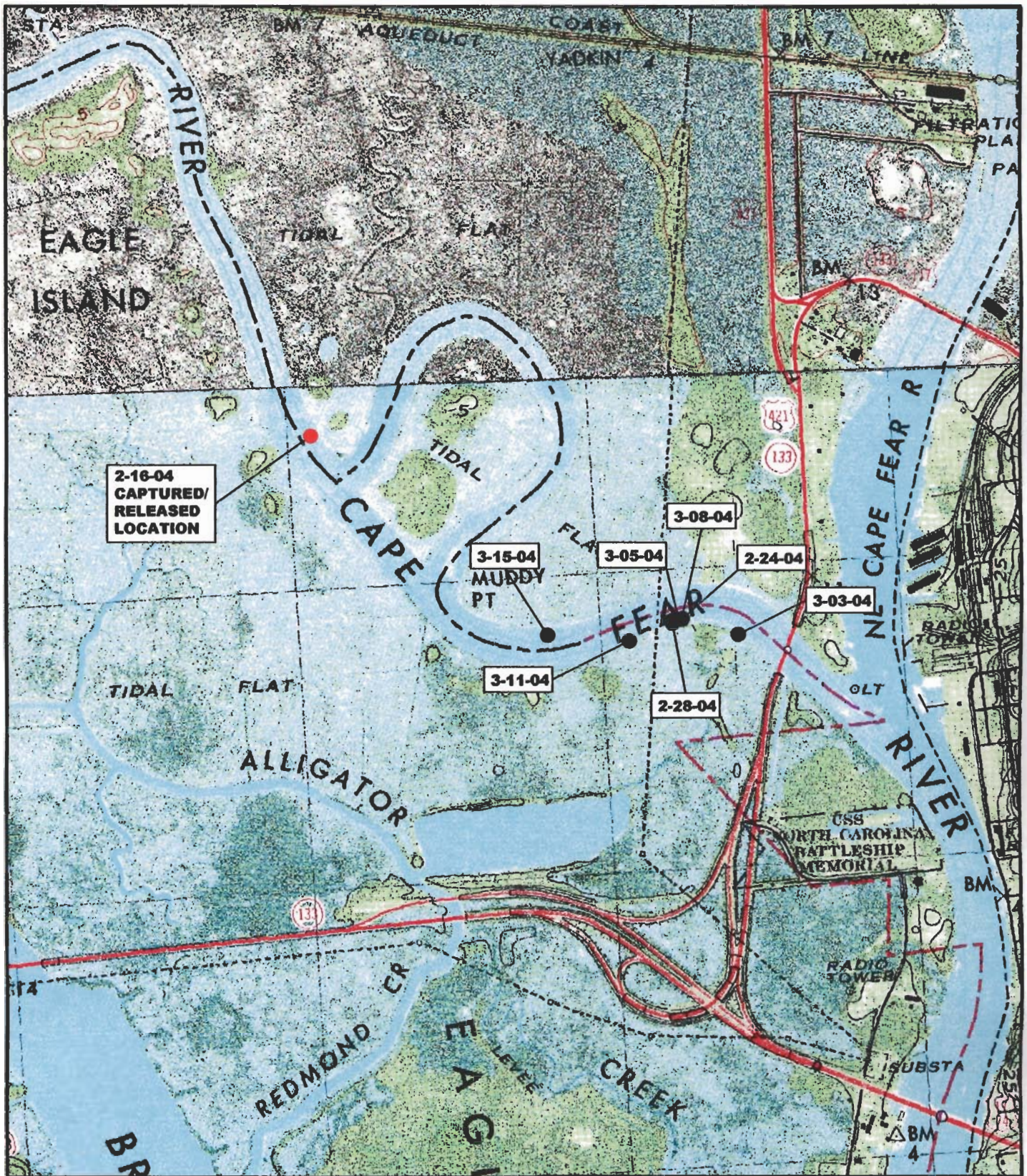


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5219

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 7/30/04

FILE: CZR5219-04

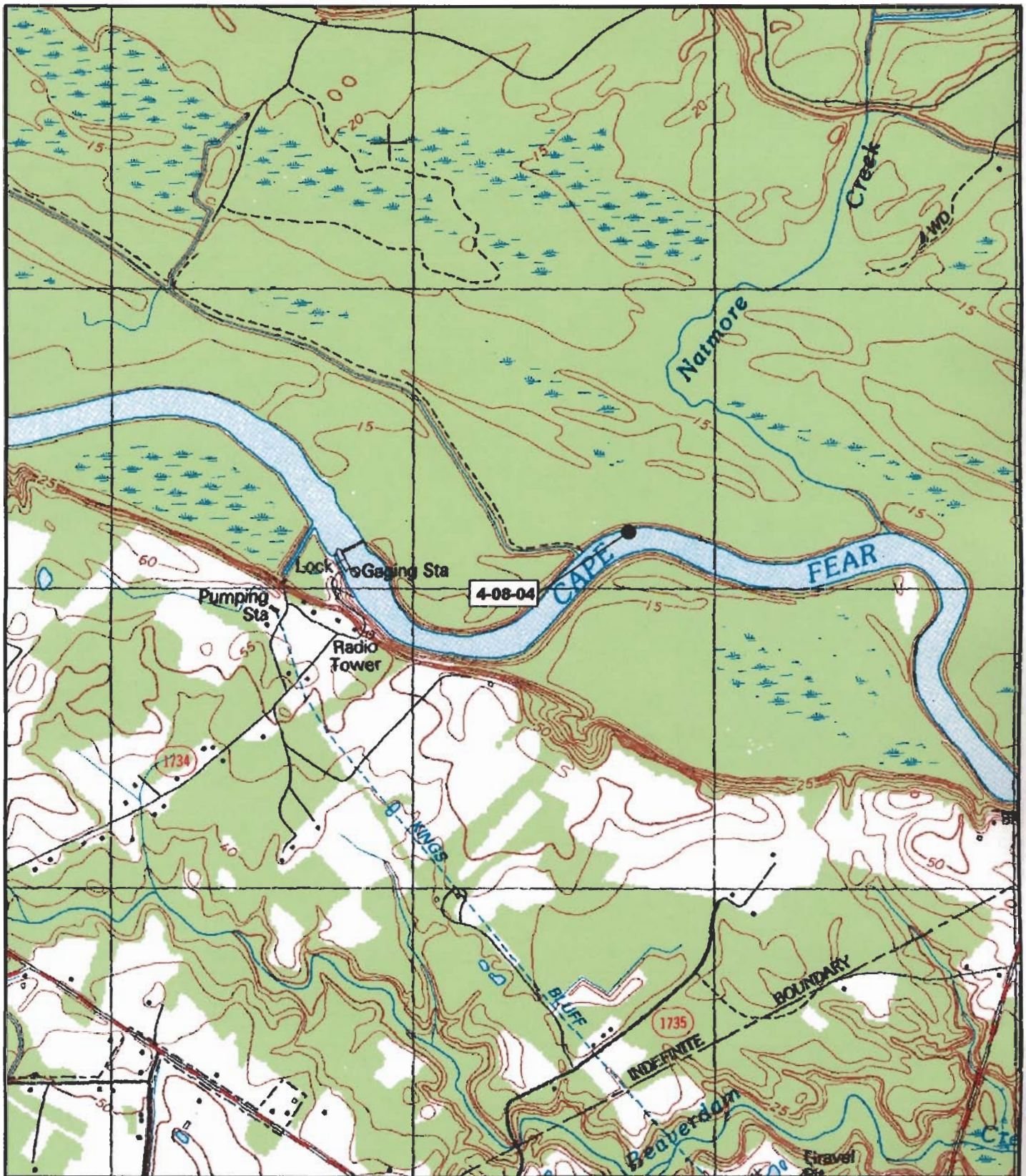


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-16-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5219

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN APPROVED BY: DRAWN BY: TLJ/TJB  
DATE: 7/30/04 FILE: CZR5219-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5220

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5220-04

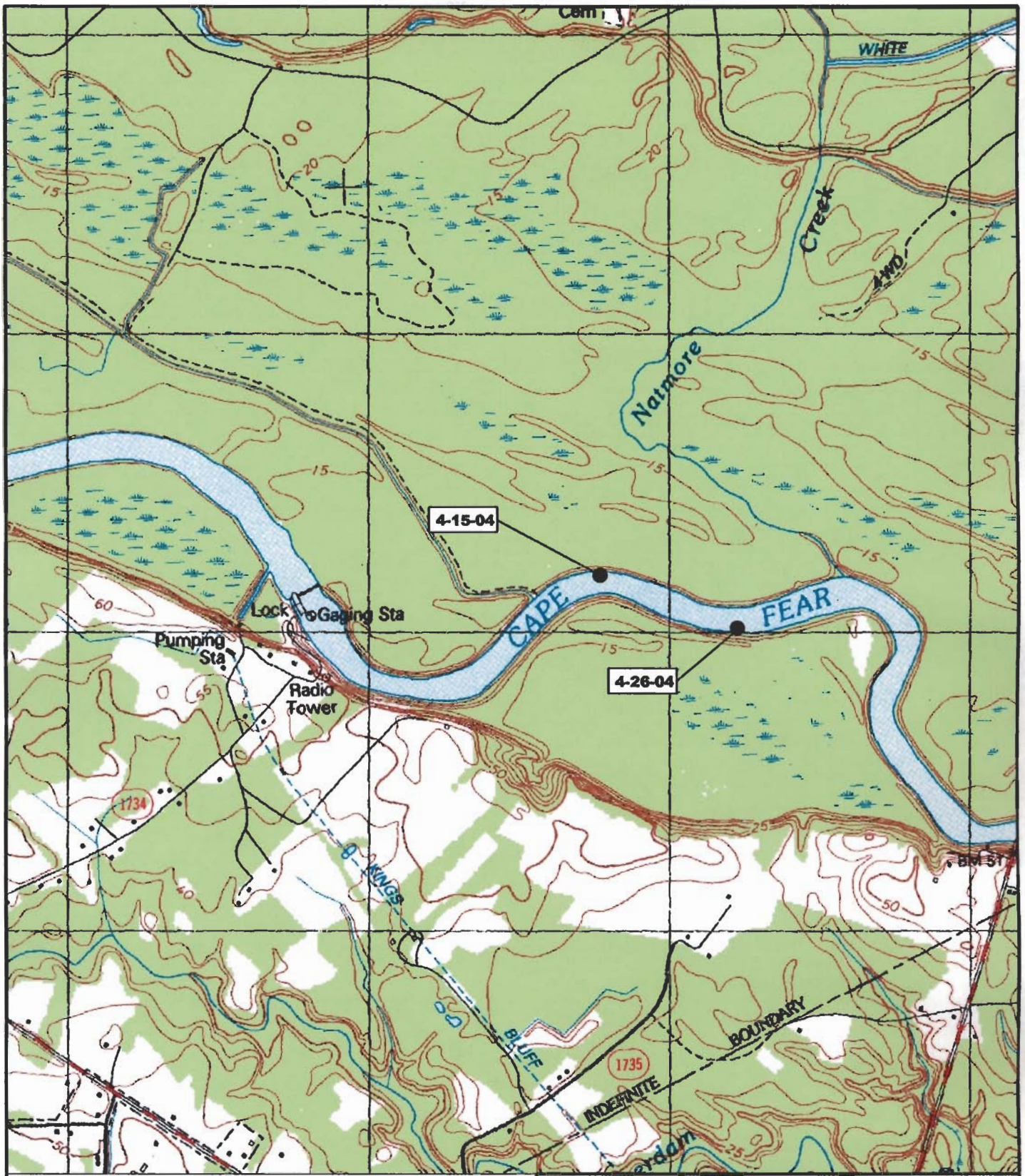


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5220**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/15/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5220-04

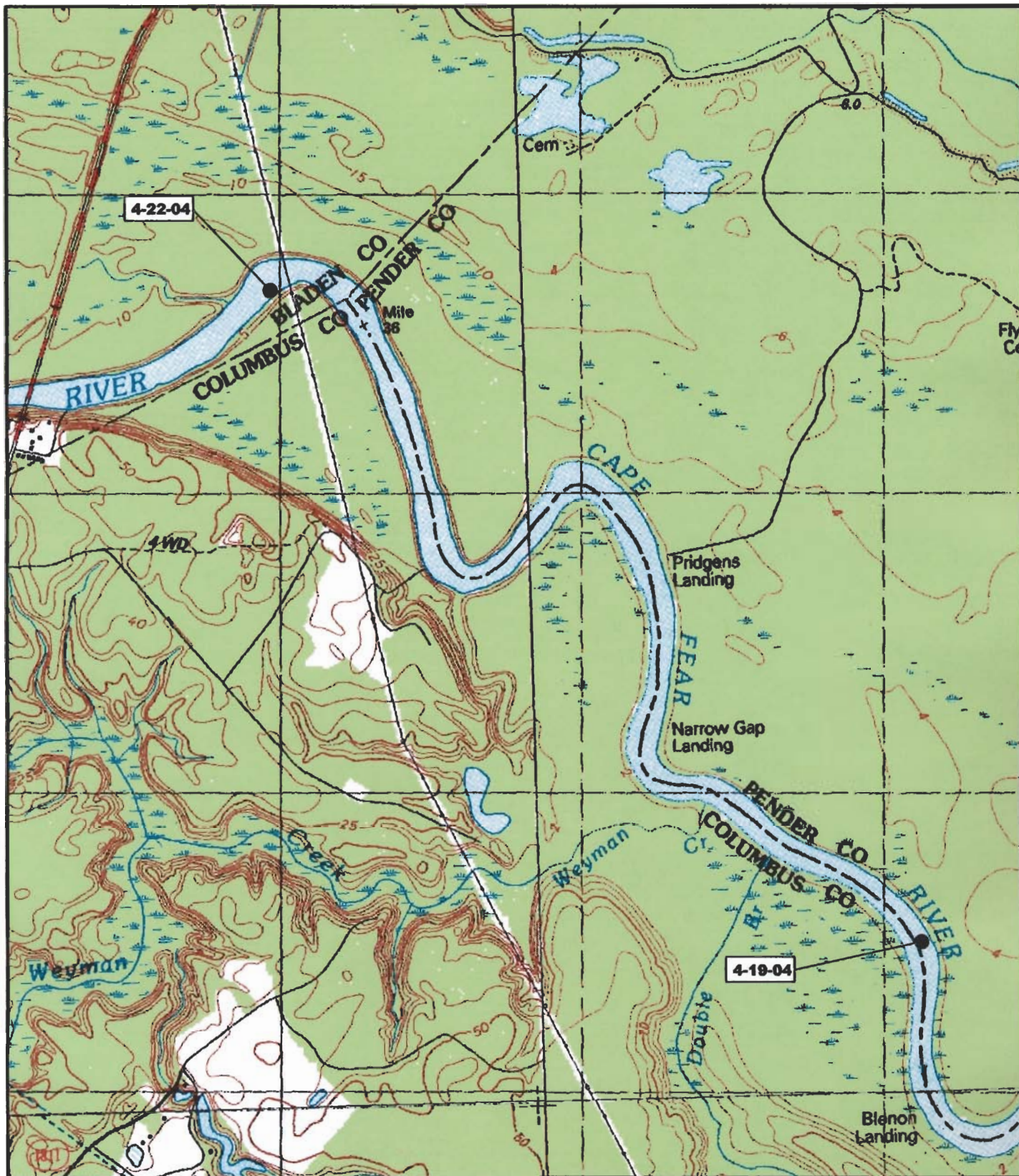


4709 COLLEGE ACRES DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5220**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5220-04

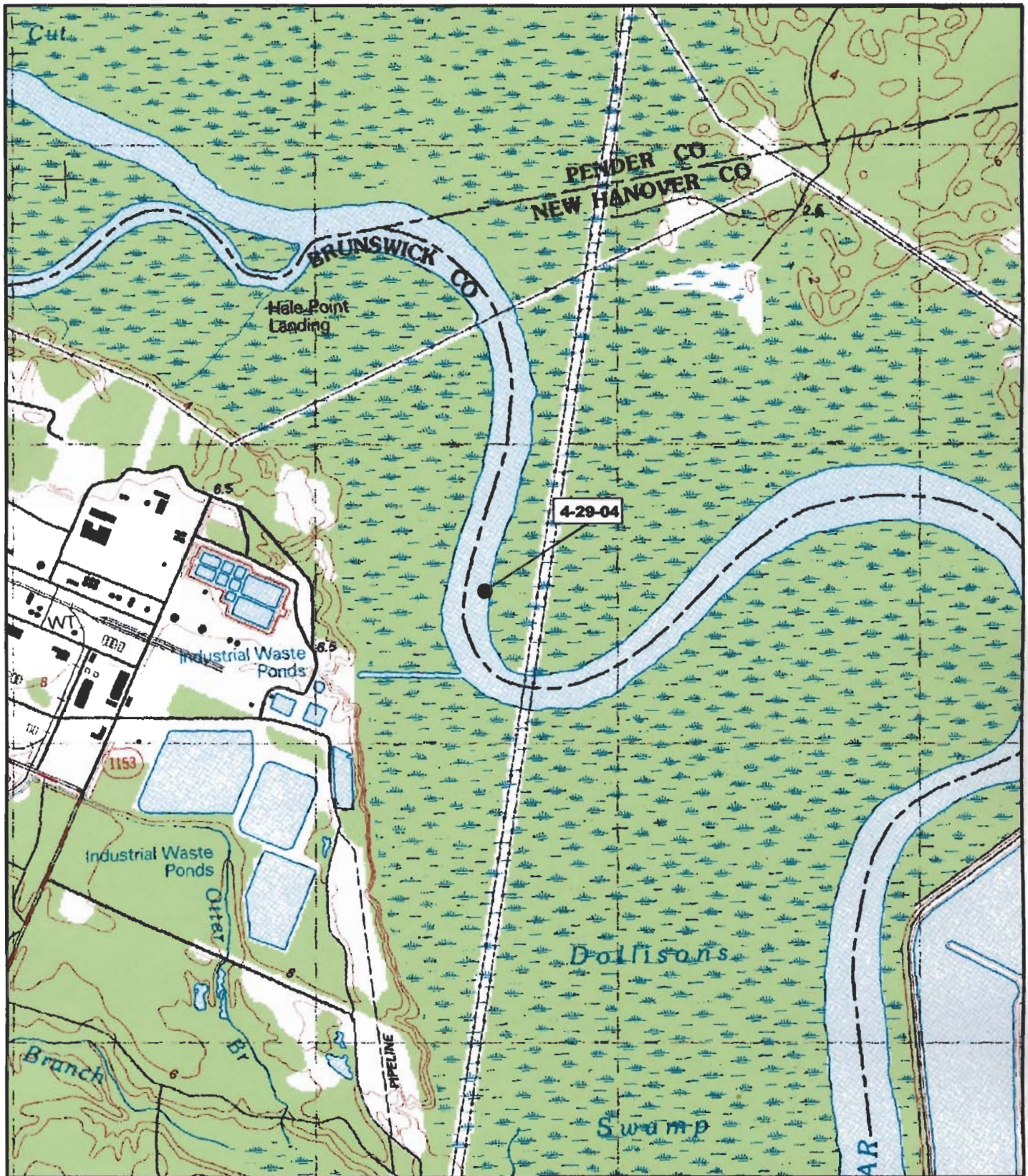


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5220**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN APPROVED BY: DRAWN BY: TLJ/TJB  
 DATE: 8/15/04 FILE: CZR5220-04

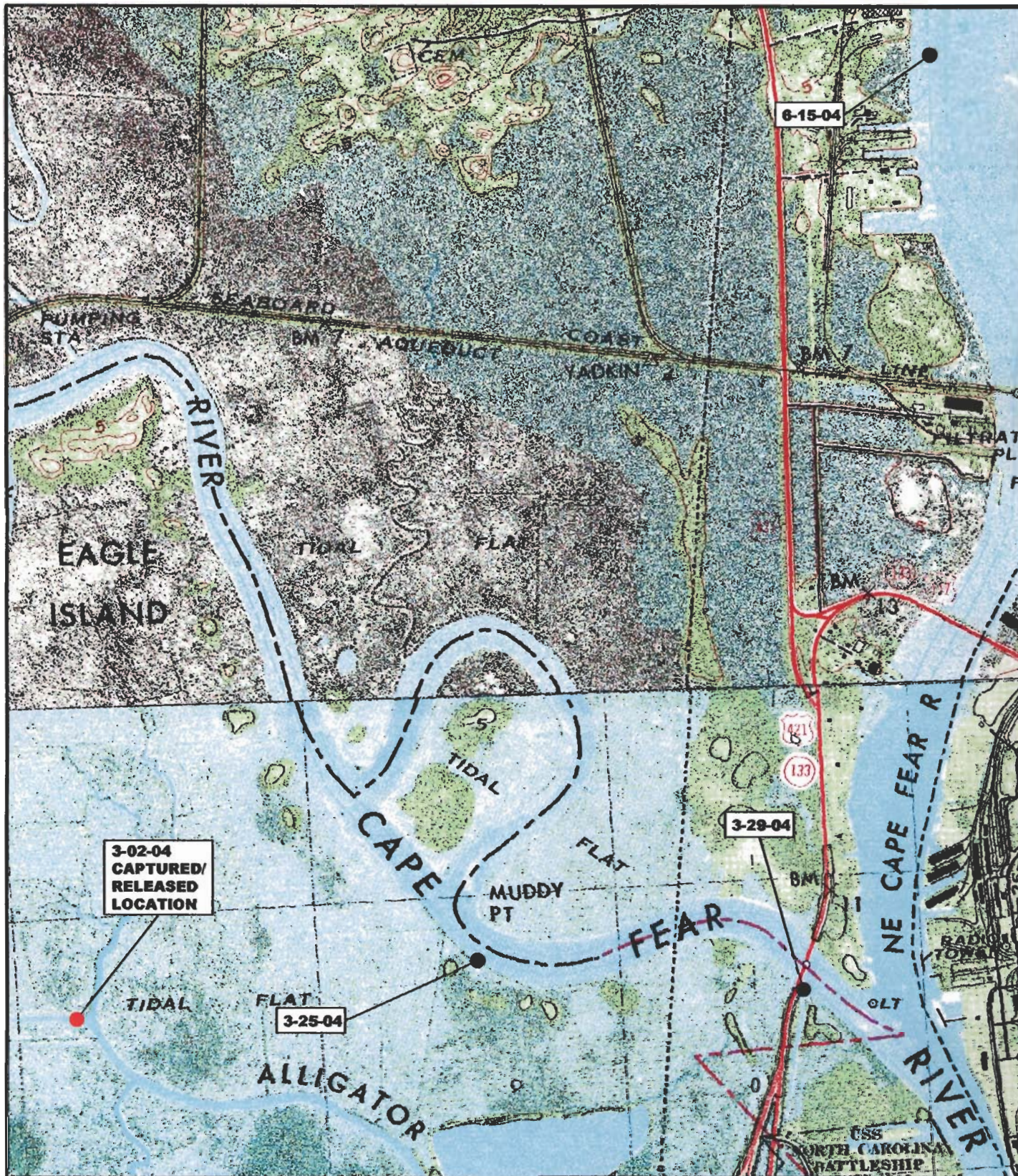


4708 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

4 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5221**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/03/04

APPROVED BY:

DRAWN BY: TLJ/TJB

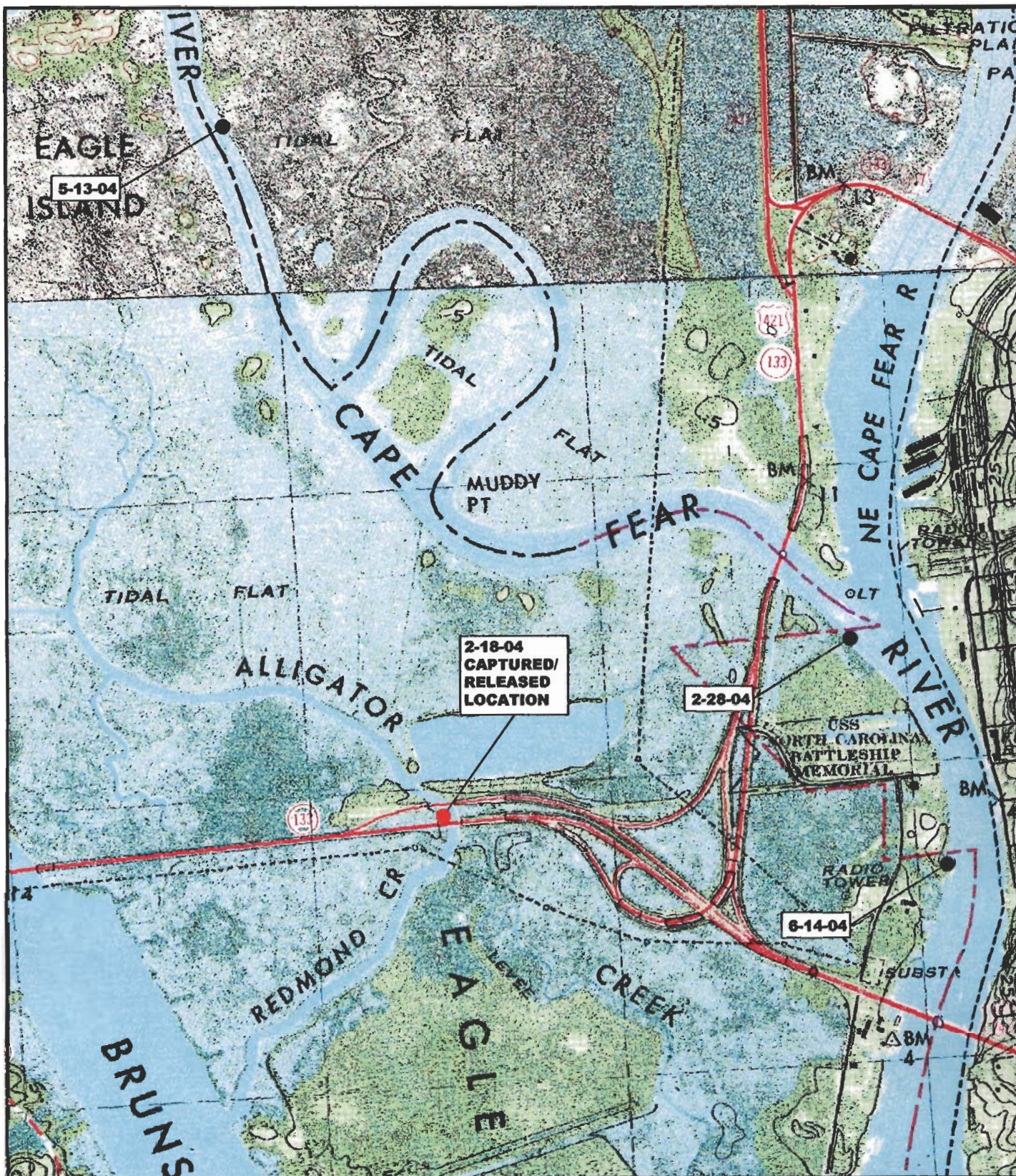
FILE: CZR5221-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5222

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/03/04

APPROVED BY:  
*[Signature]*

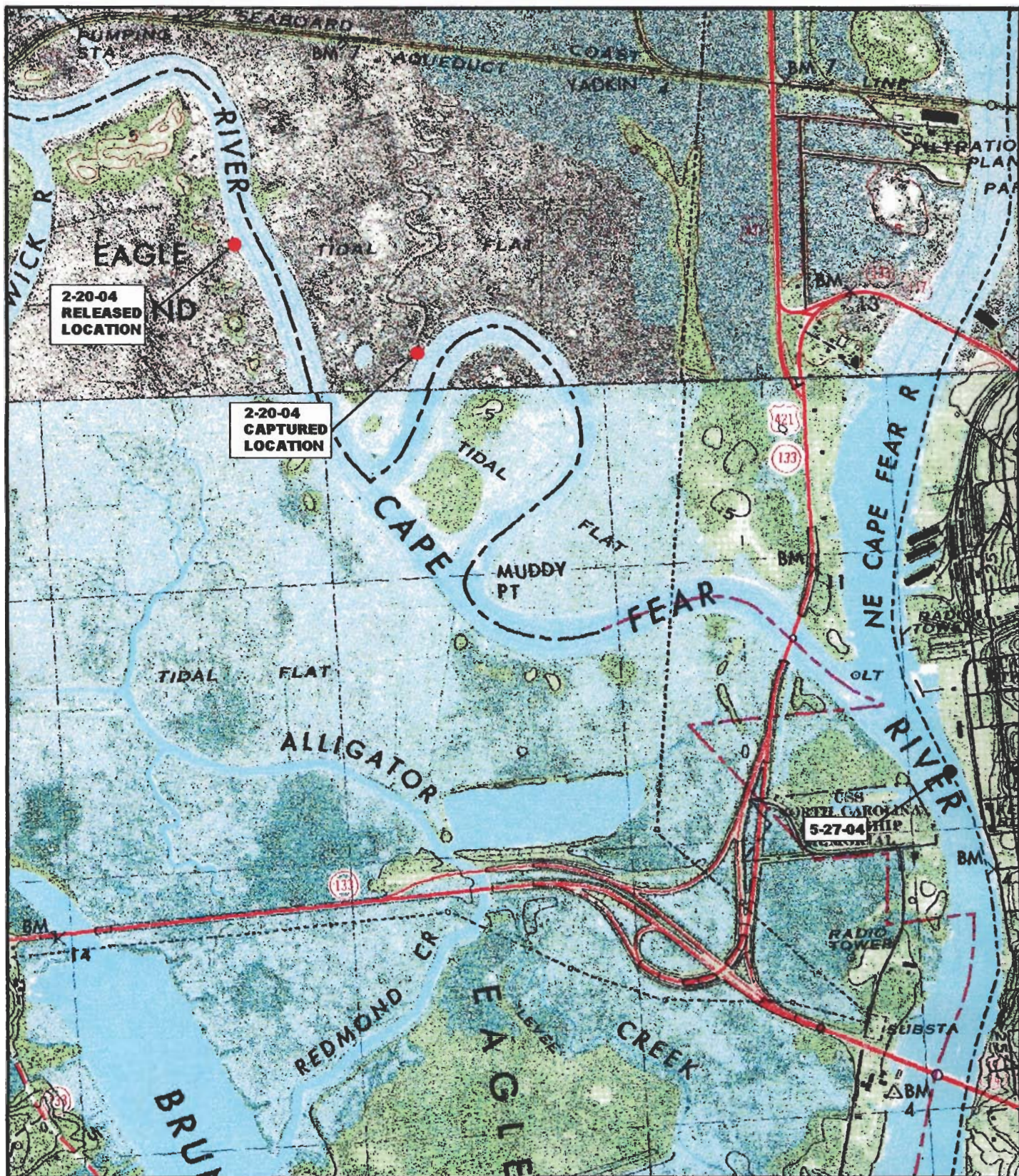
DRAWN BY: TLJ/TJB  
FILE: CZR5222-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9159

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5223

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/03/04

FILE: CZR5223-04

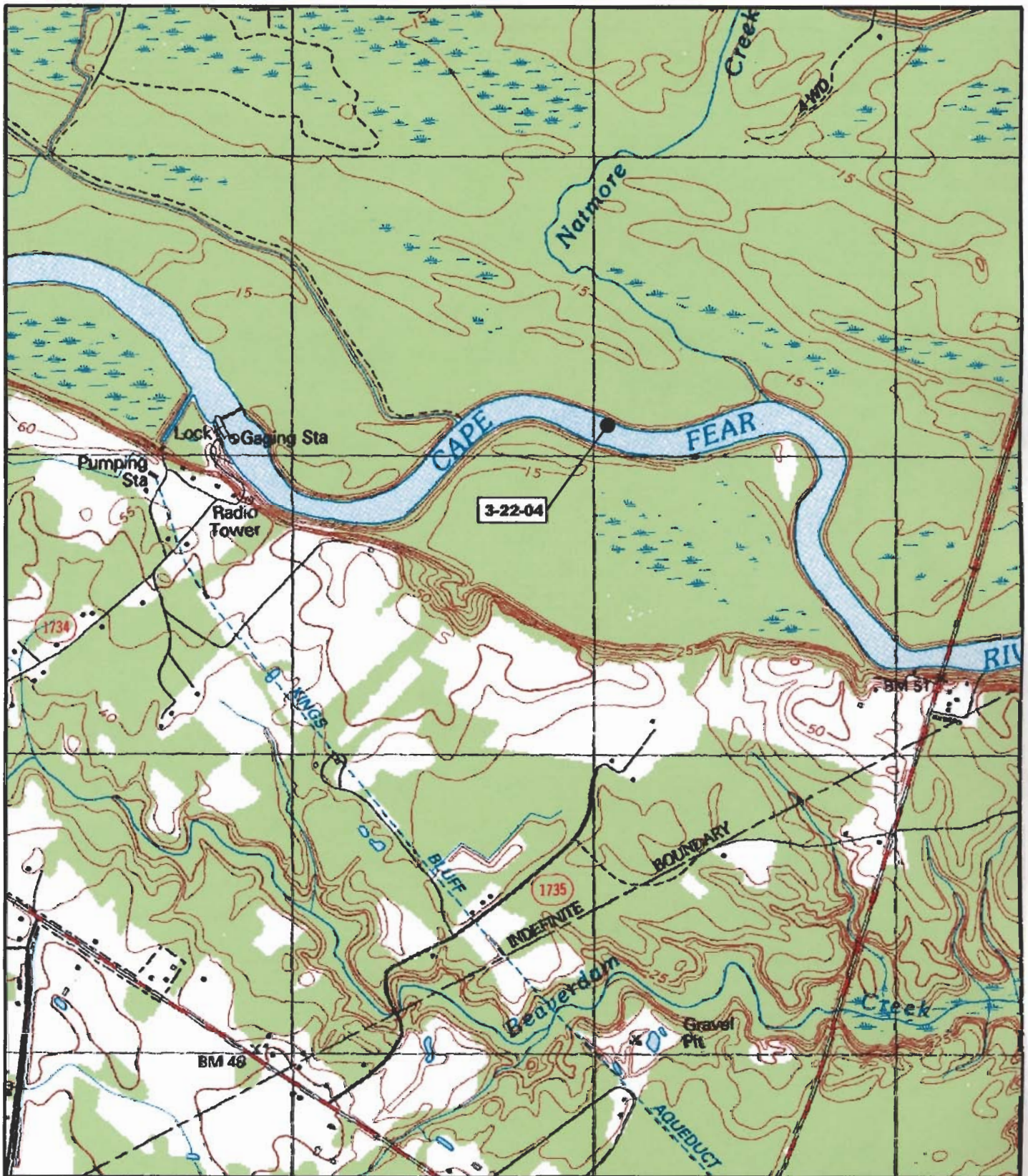


4708 COLLEGE ACRES DRIVE  
SUITE 3  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8138

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5223**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/03/04

FILE: CZR5223-04

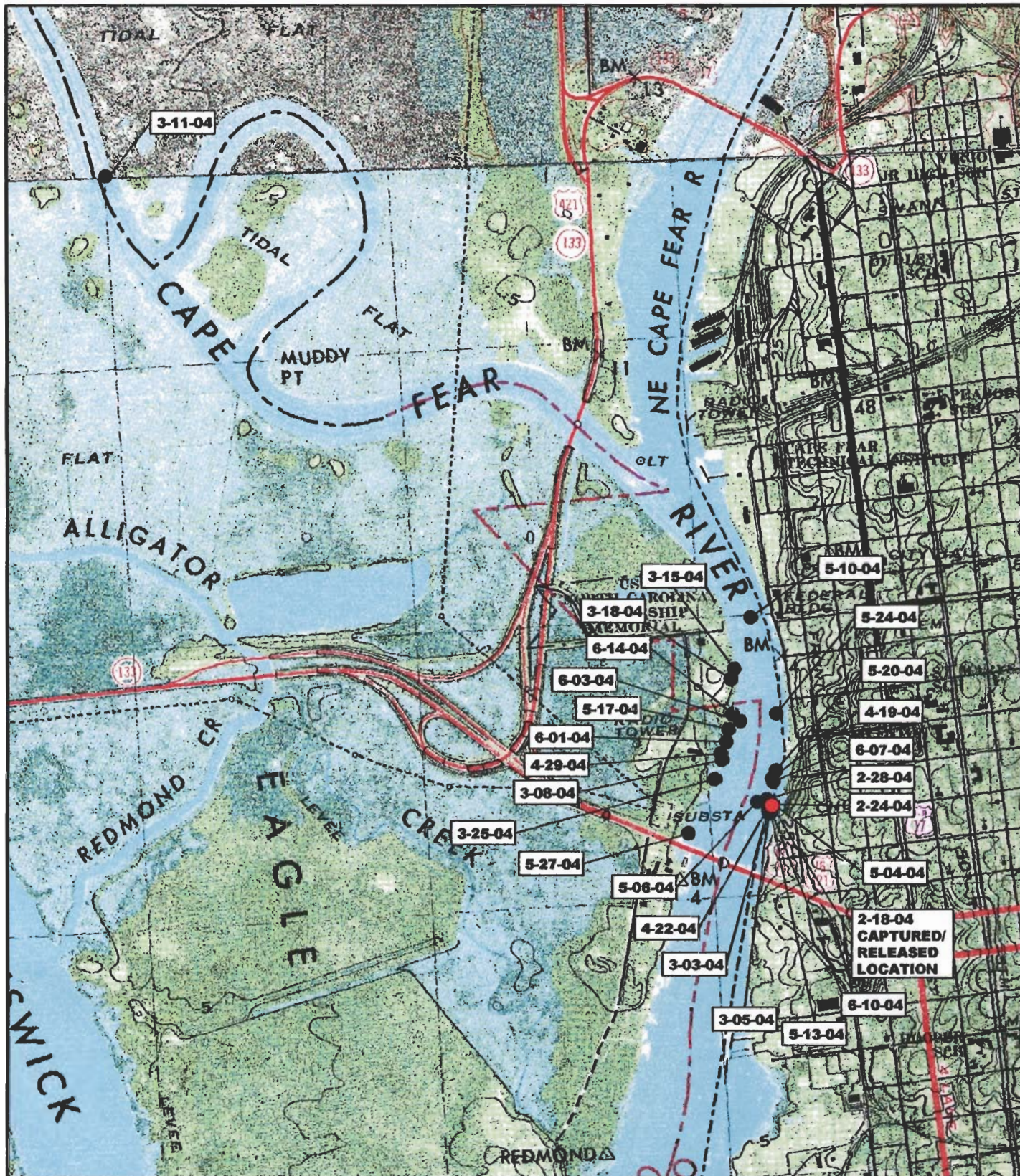


4709 COLLEGE ACRES DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5224

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/15/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5224-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5224**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/04/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLI/TJB  
FILE: CZR5224-04

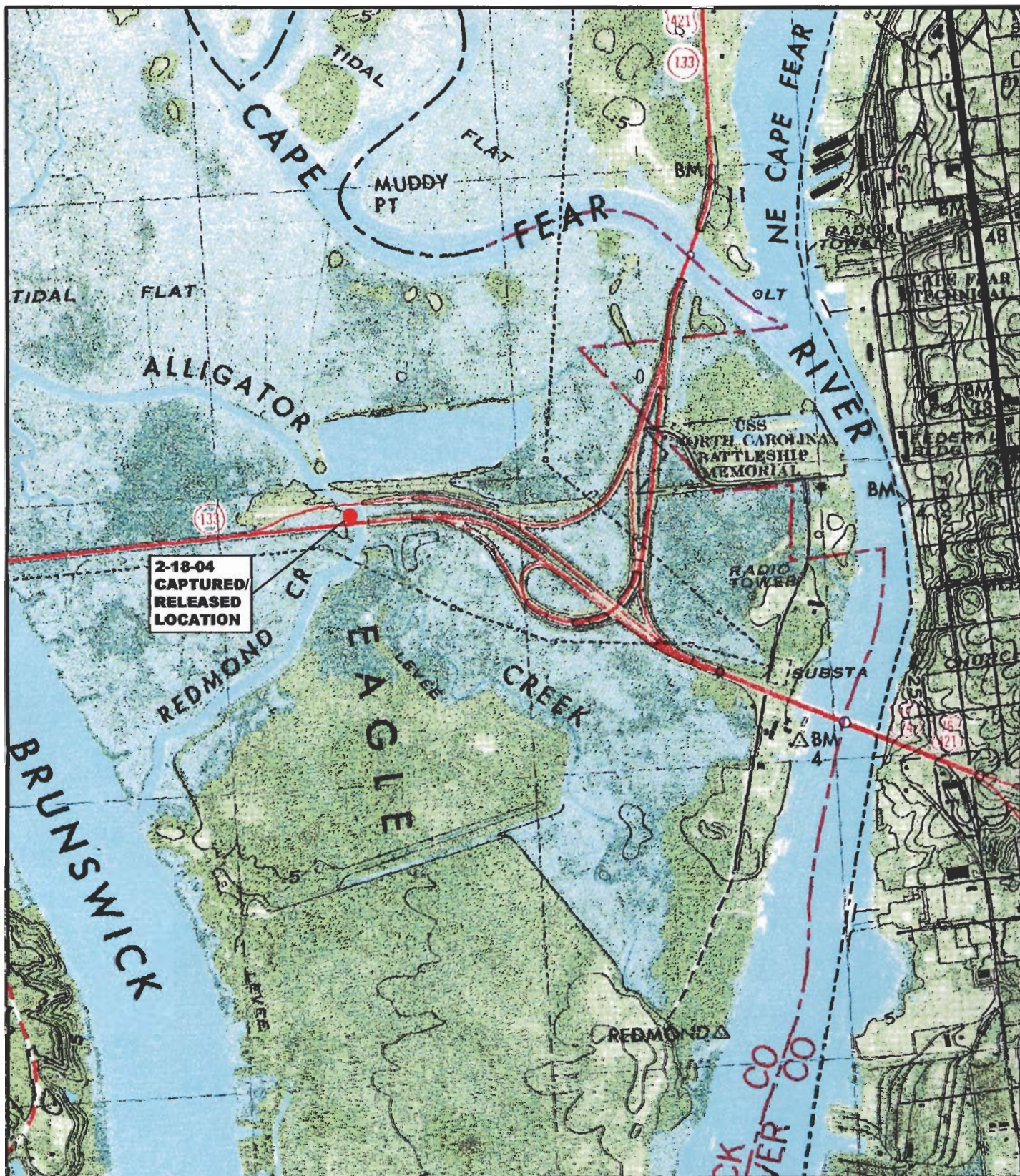


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5225**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/04/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

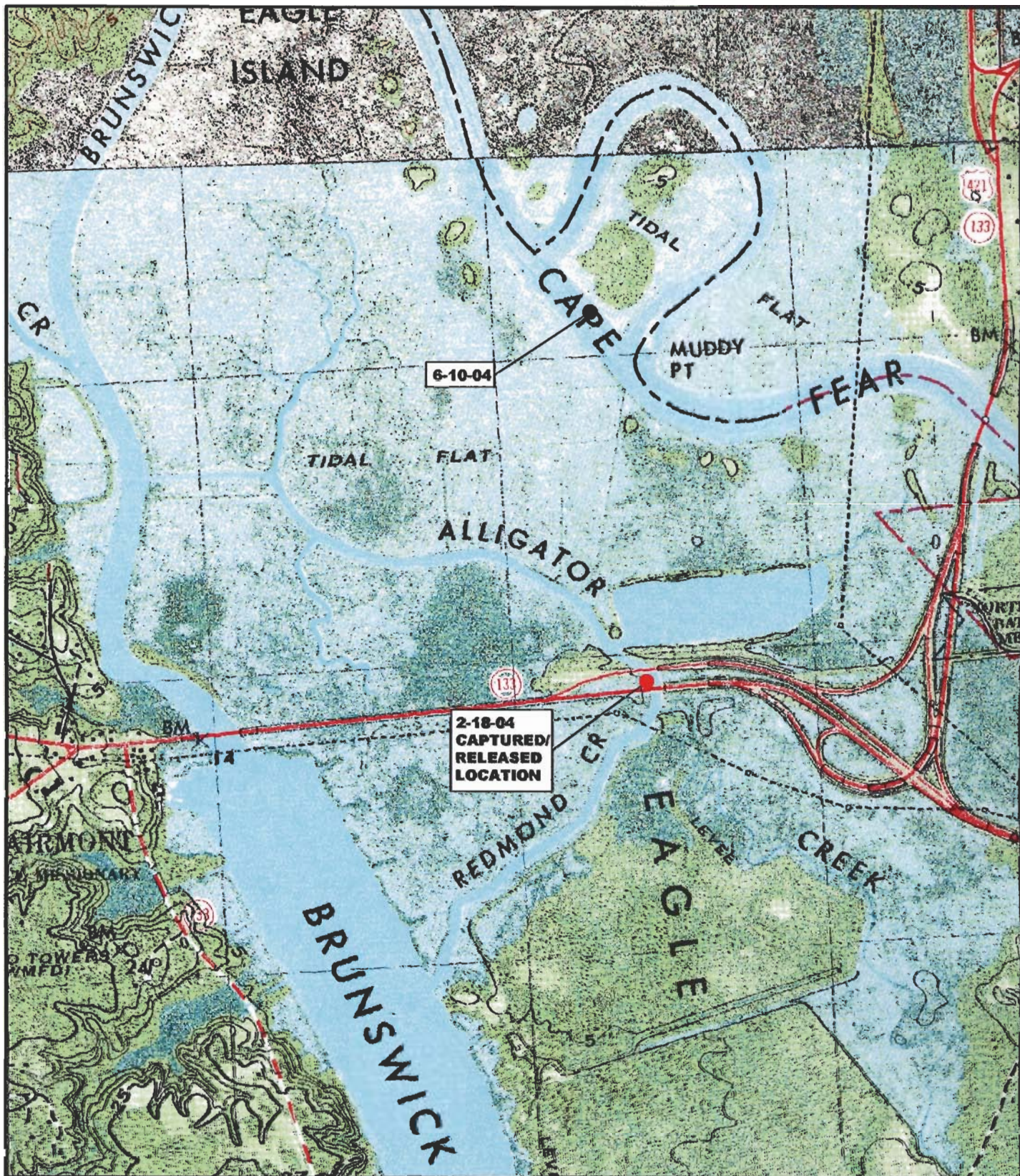
FILE: CZR5225-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5226**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/04/04

FILE: CZR5226-64

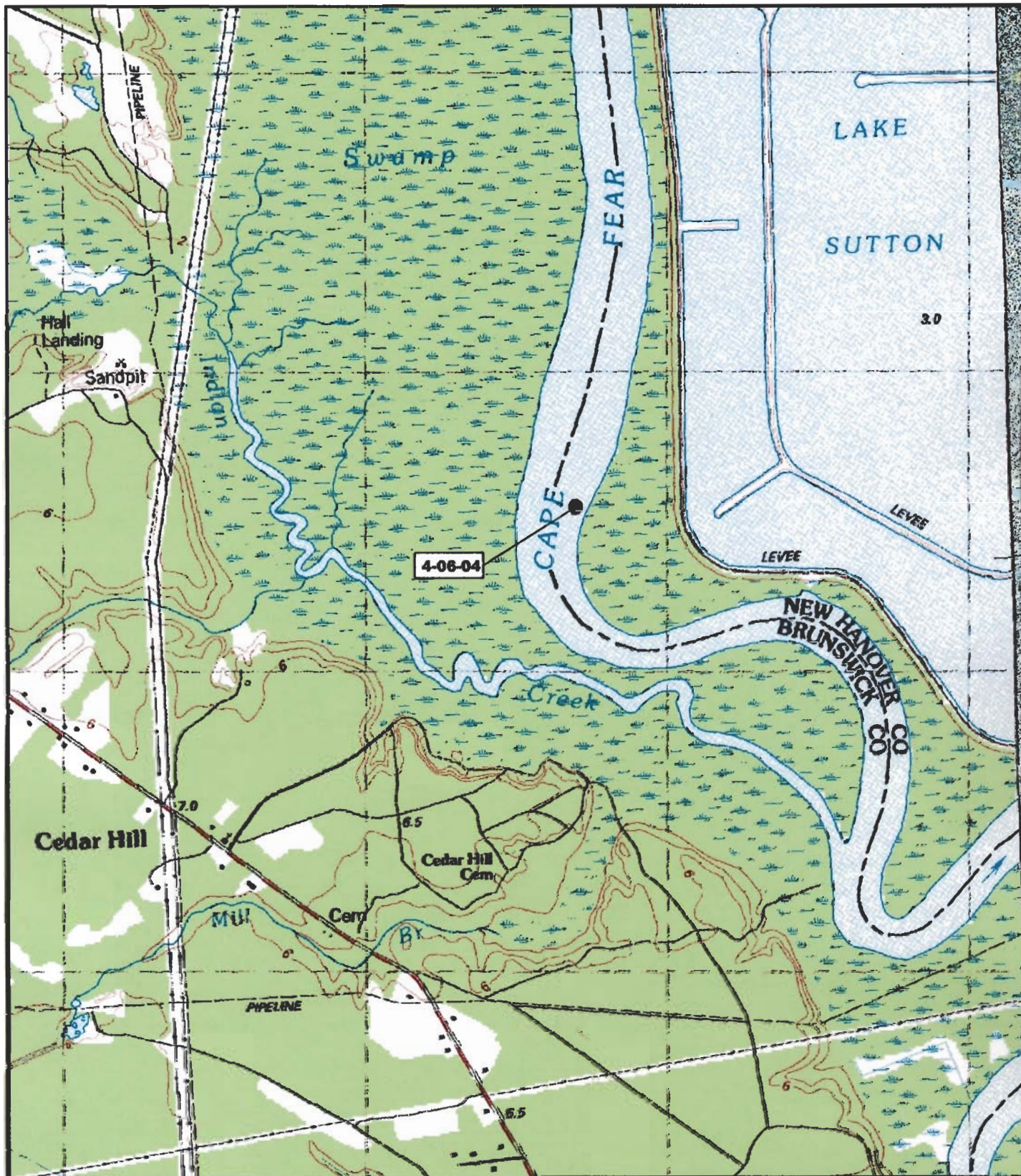


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9153  
FAX 910/392-9139

CP#1976.00

1 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5226

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/04/04

FILE: CZR5226-04

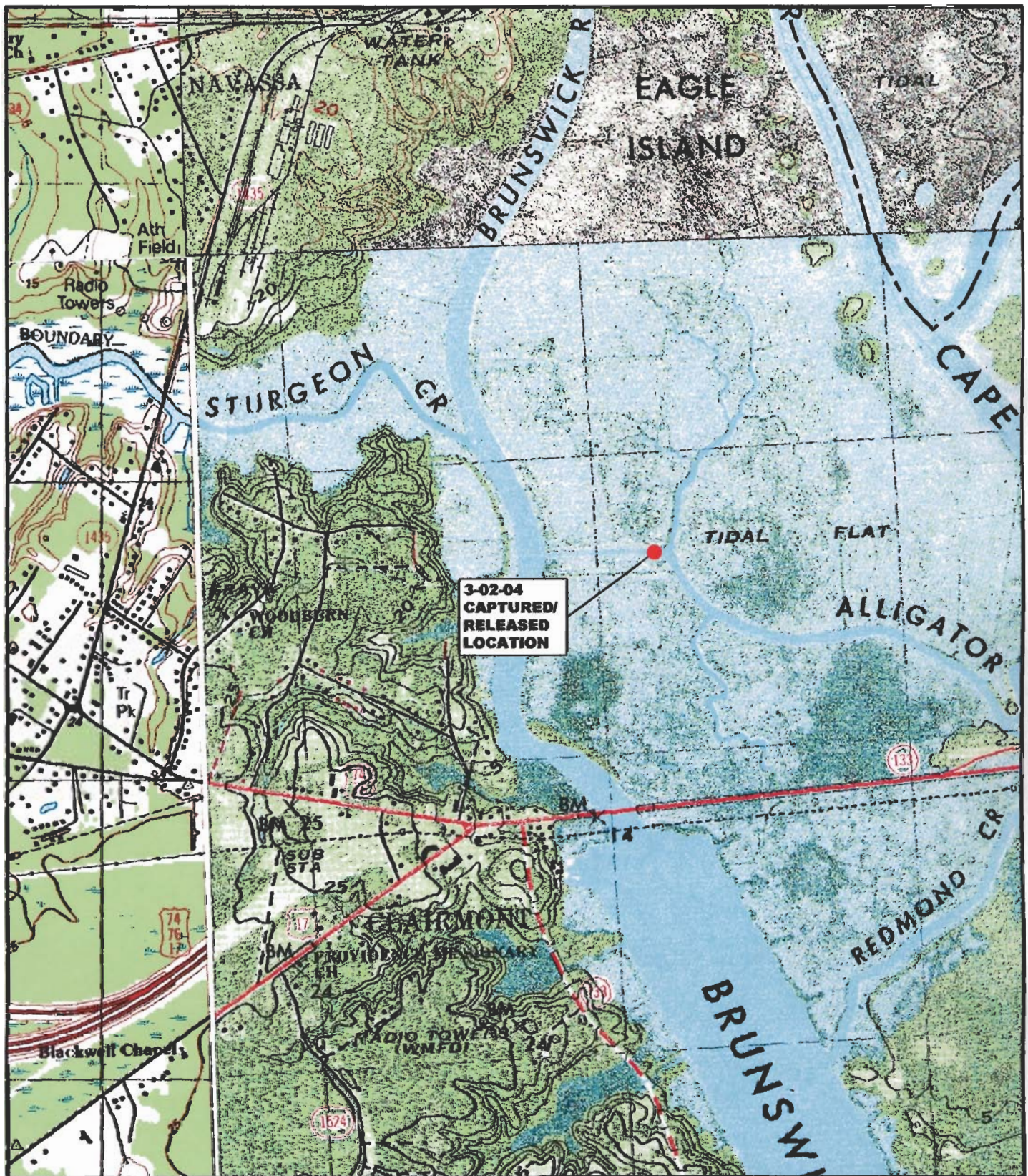


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5227

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*MW*

DRAWN BY: TLU/TJB

FILE: CZR5227-04

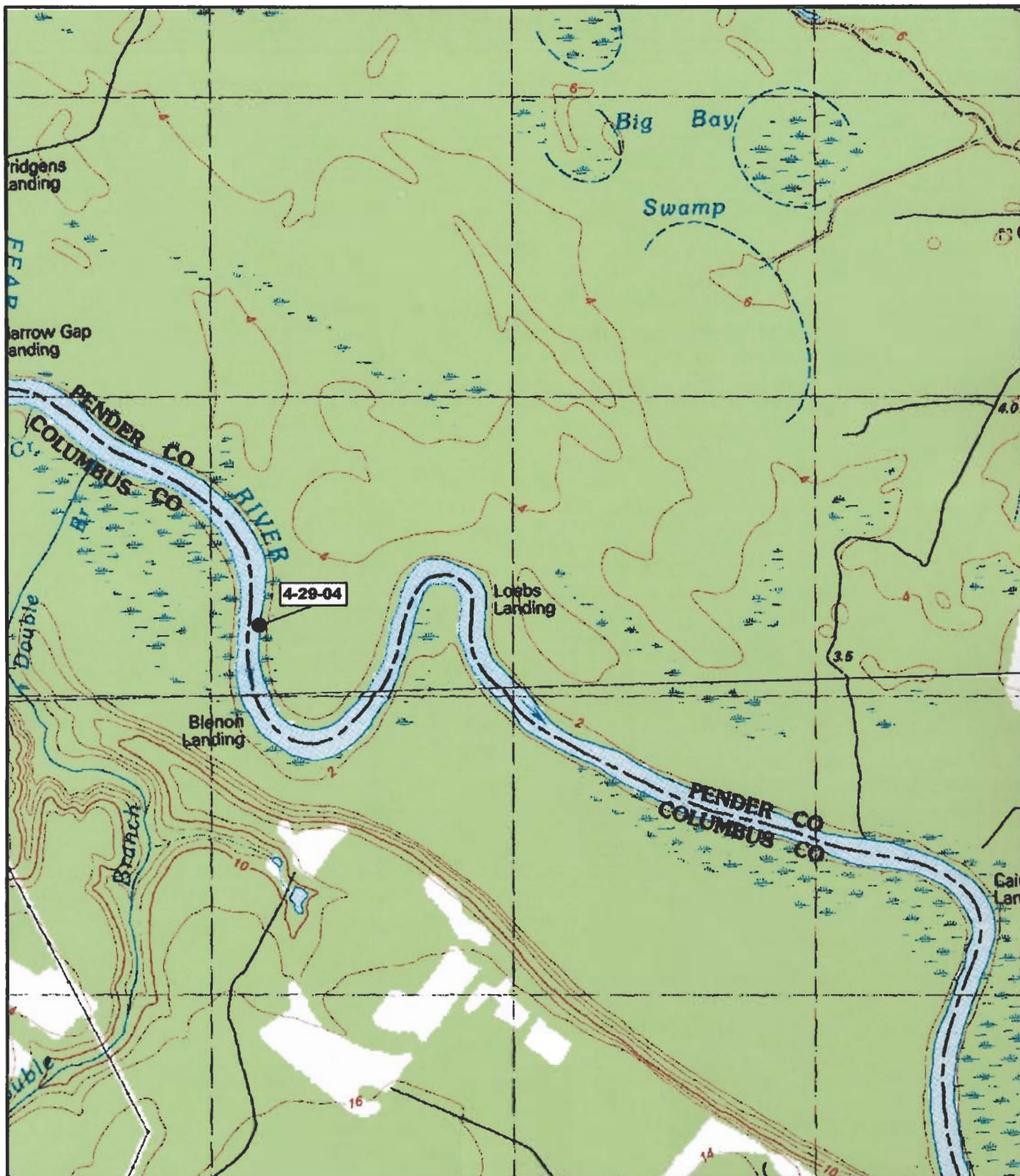


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



## **SITE OF RELOCATED STRIPED BASS CZR5227**

### **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5227-04

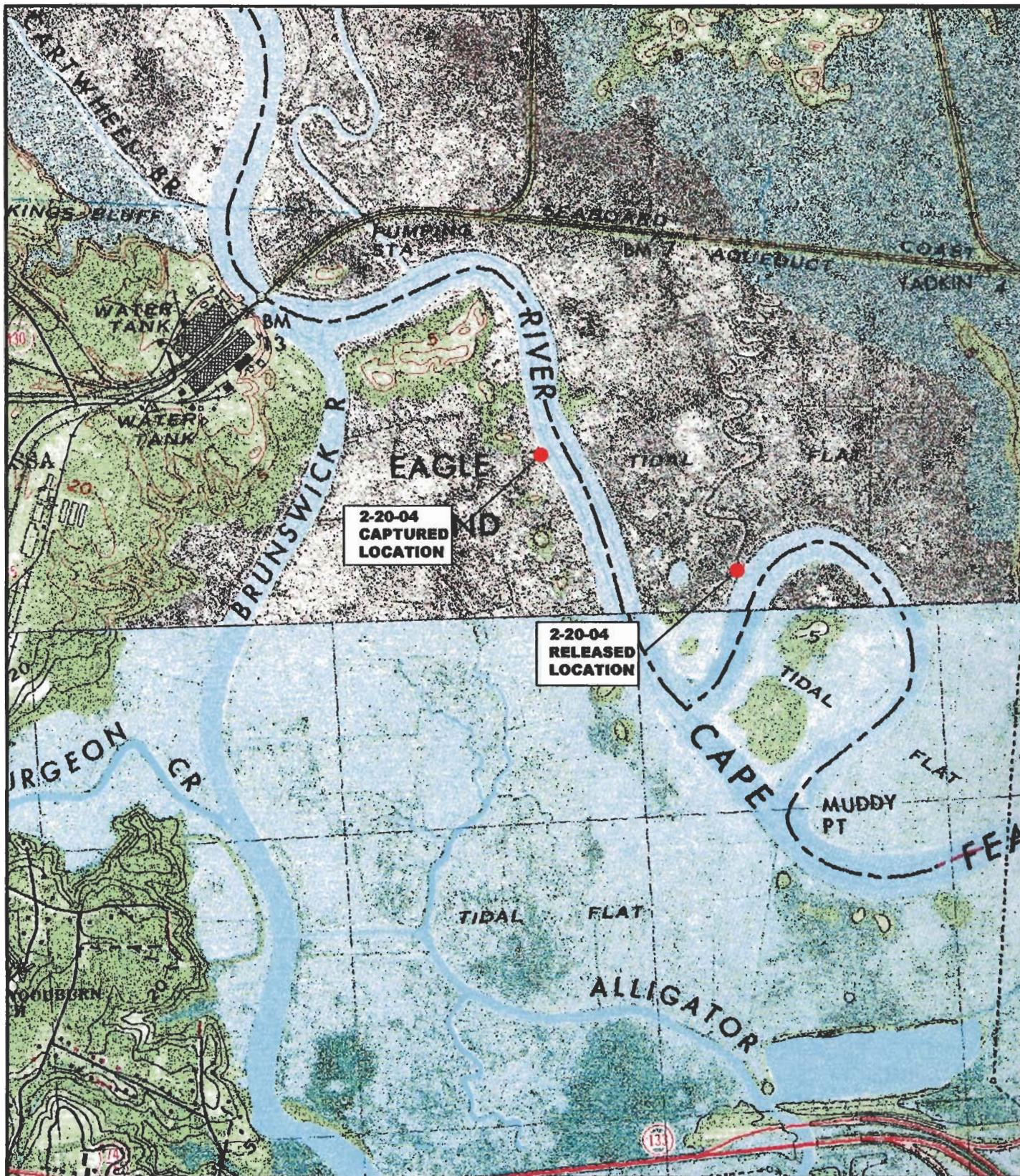


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5228

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/04/04

APPROVED BY:

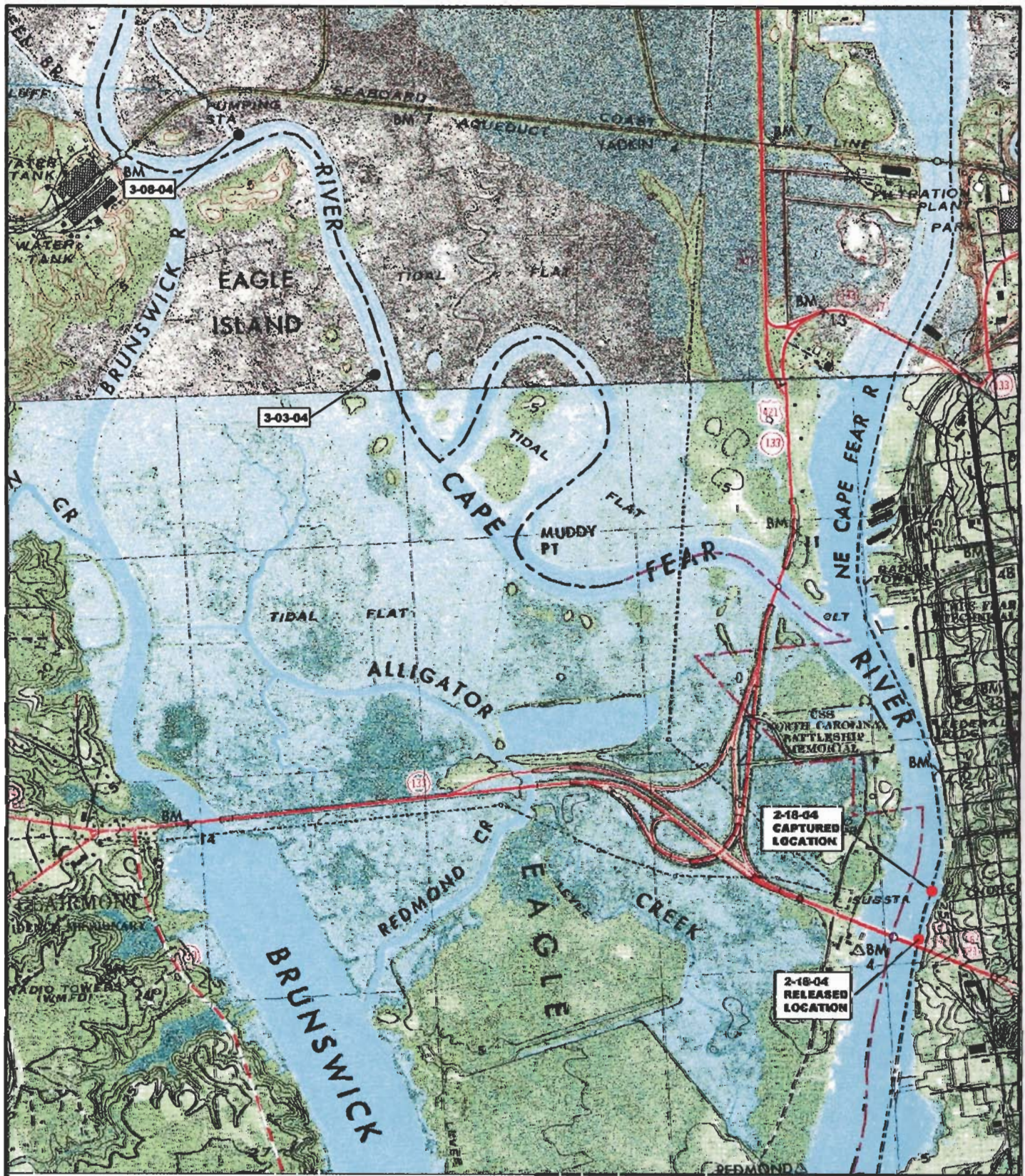
DRAWN BY: TLJ/TJB  
FILE: CZR5228-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04
- SITE OF RELOCATED FISH



SITE OF RELOCATED STRIPED BASS  
CZR5229

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

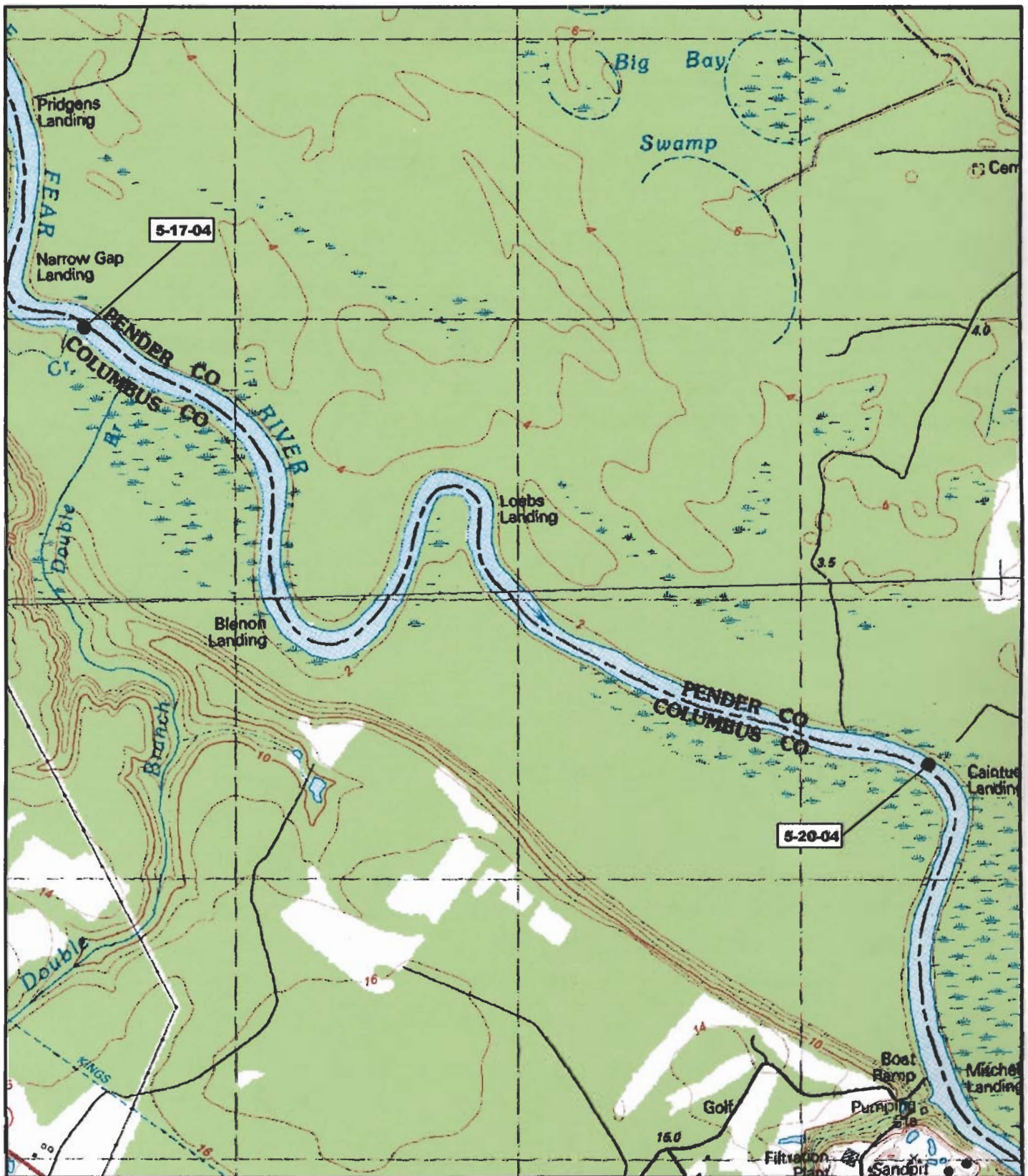
SCALE: AS SHOWN      APPROVED BY: *[Signature]*      DRAWN BY: TLJ/TJB  
DATE: 8/04/04      FILE: CZR5229-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00  
1 OF 2





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-18-04**
- **SITE OF RELOCATED FISH**

0 1600 3200  
  
 SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
 CZR5229

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/04/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5229-04

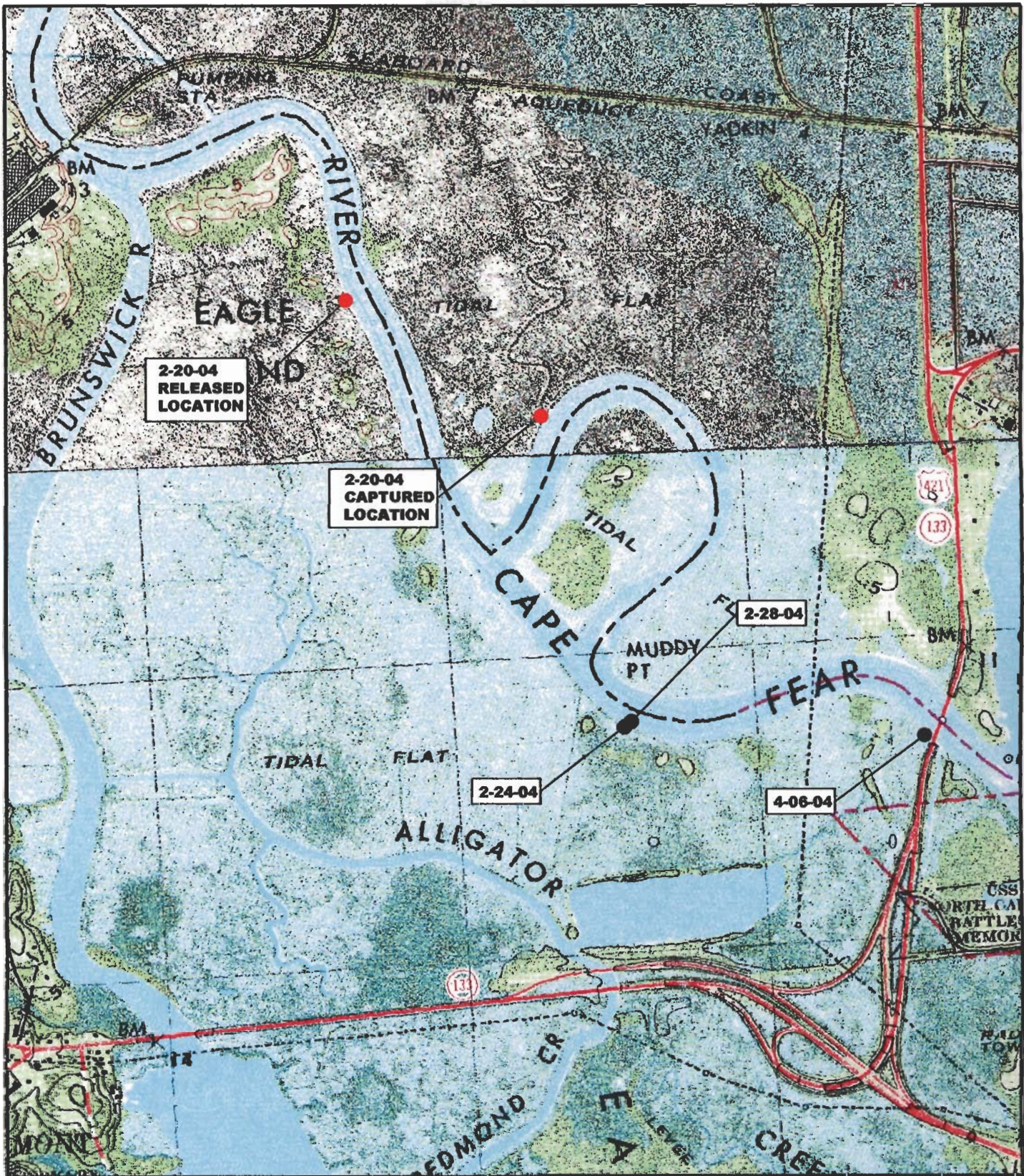


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-8253  
 FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5230

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*mw*

DRAWN BY: TLJ/TJB

FILE: CZR5250-04

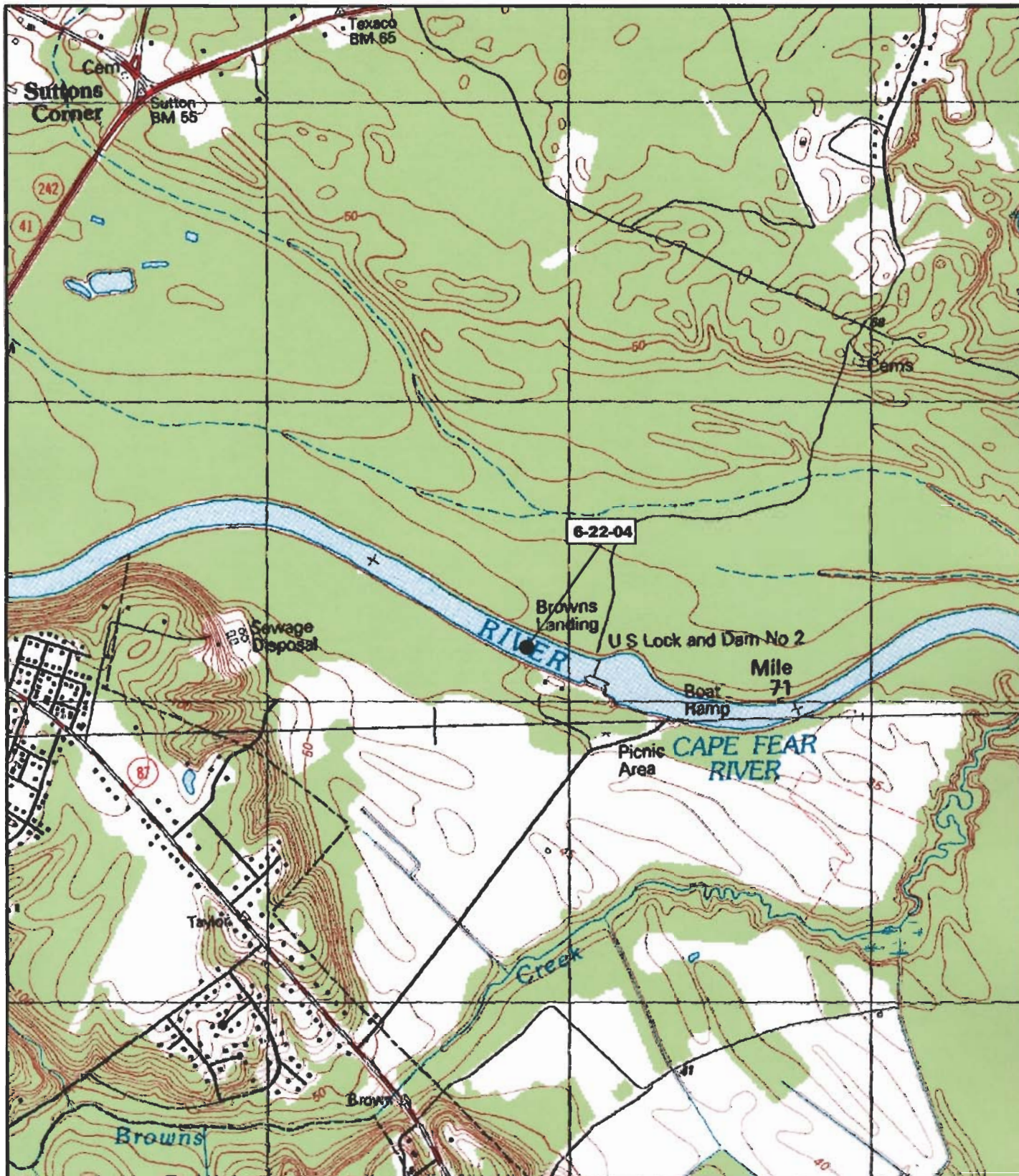


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5230**

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
 FILE: CZR5230-04

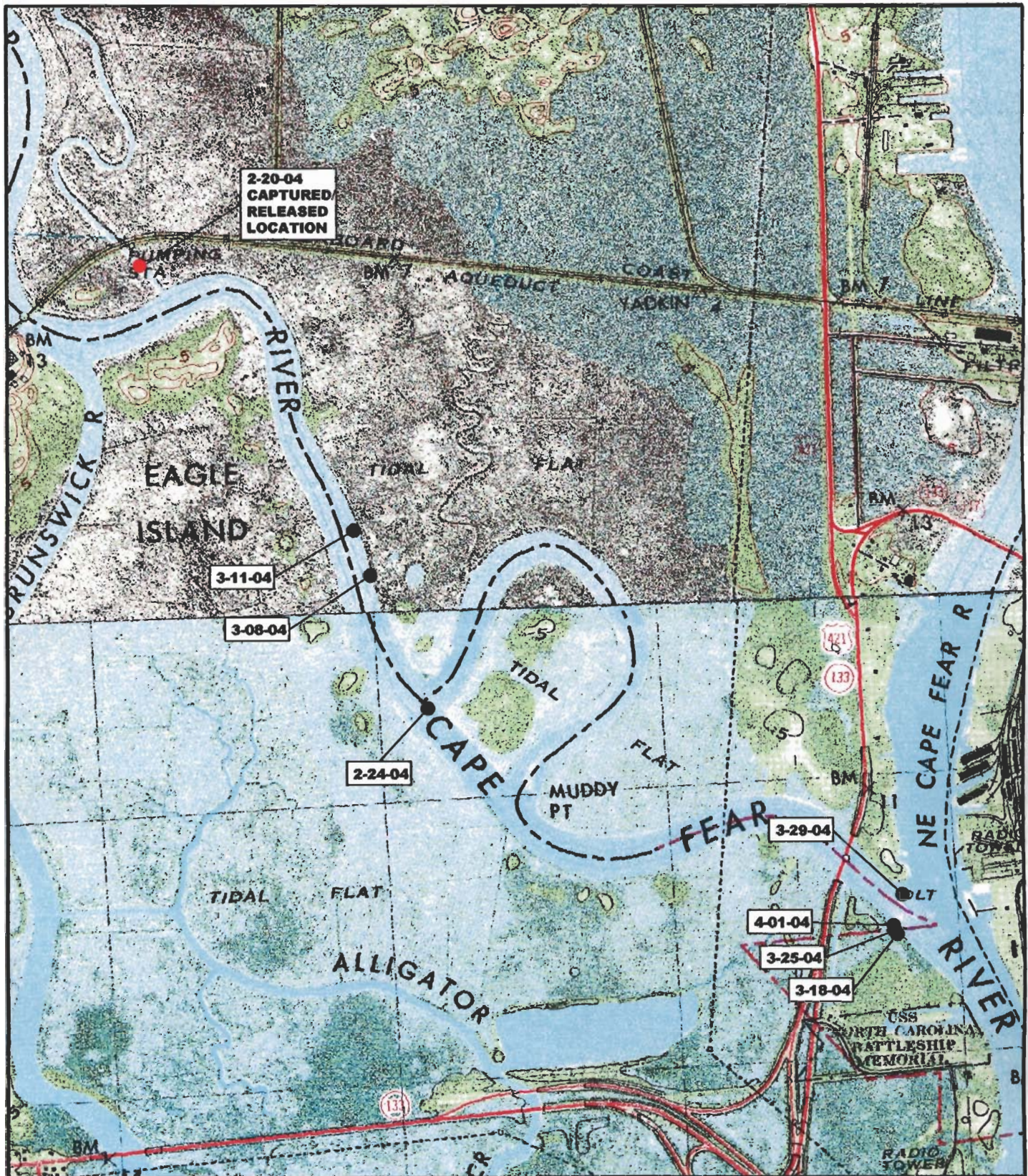


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-8253  
 FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5231

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5231-04

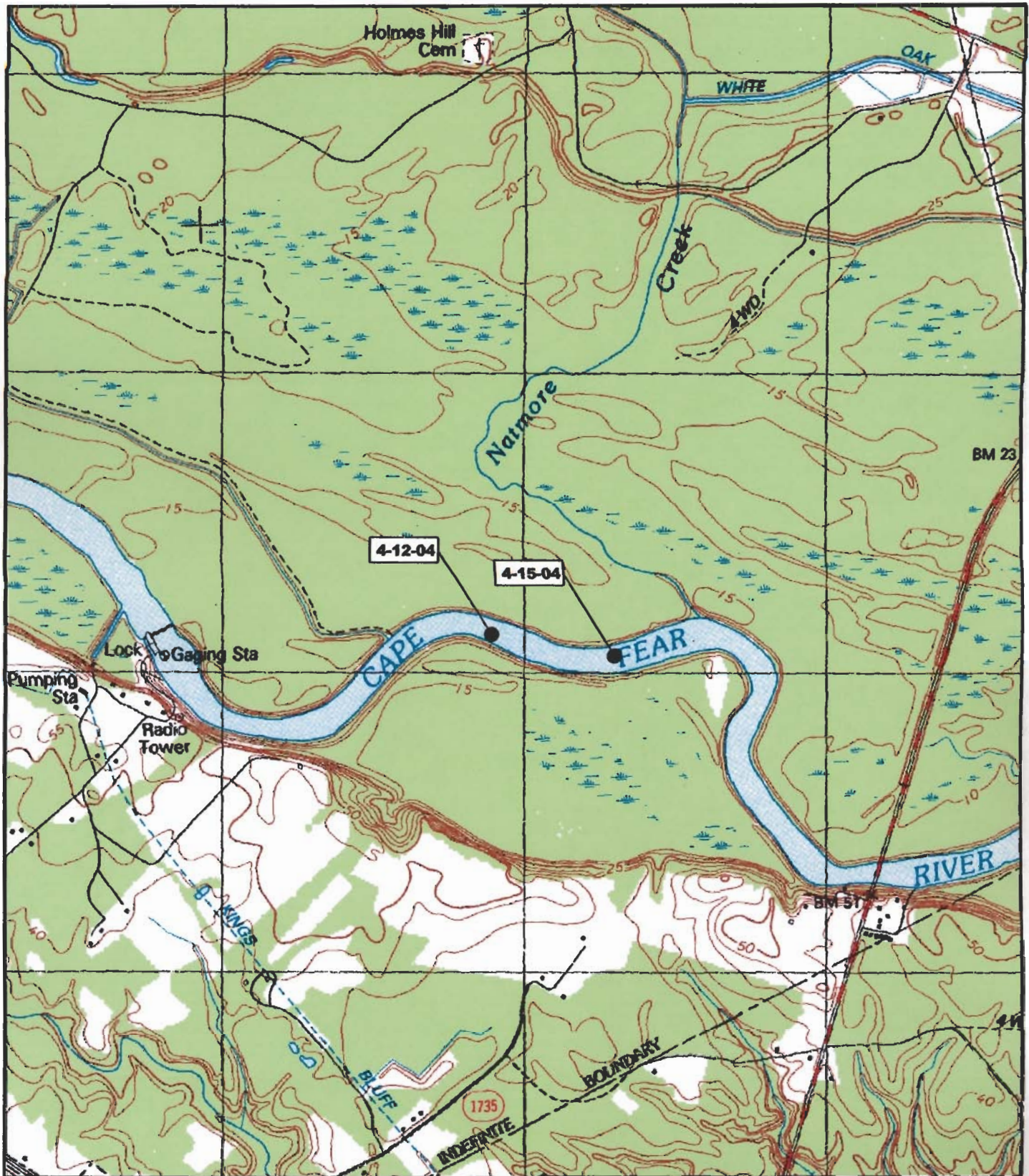


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5231**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/04/04

FILE: CZR5231-04

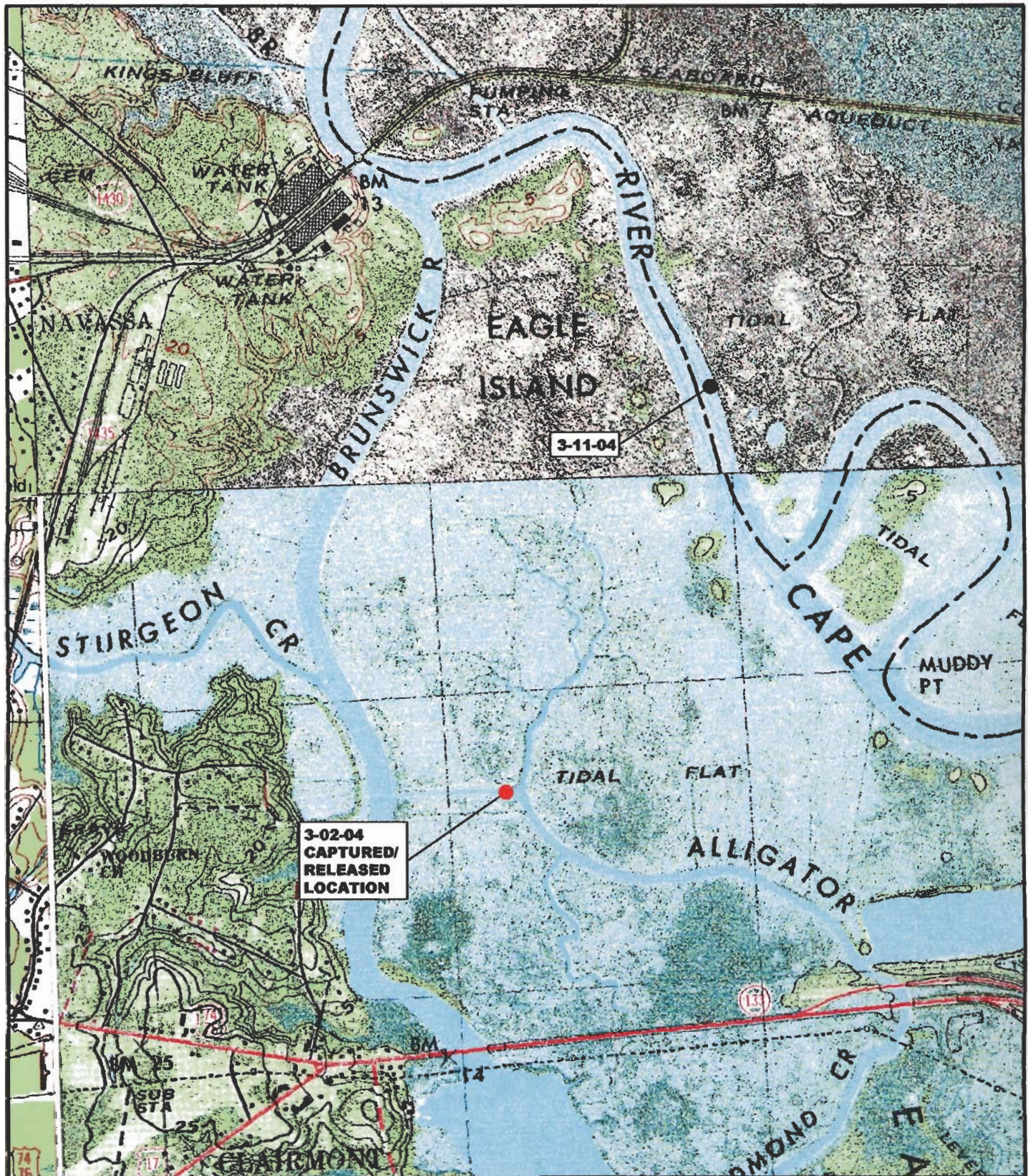


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
 CZR5232**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/05/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

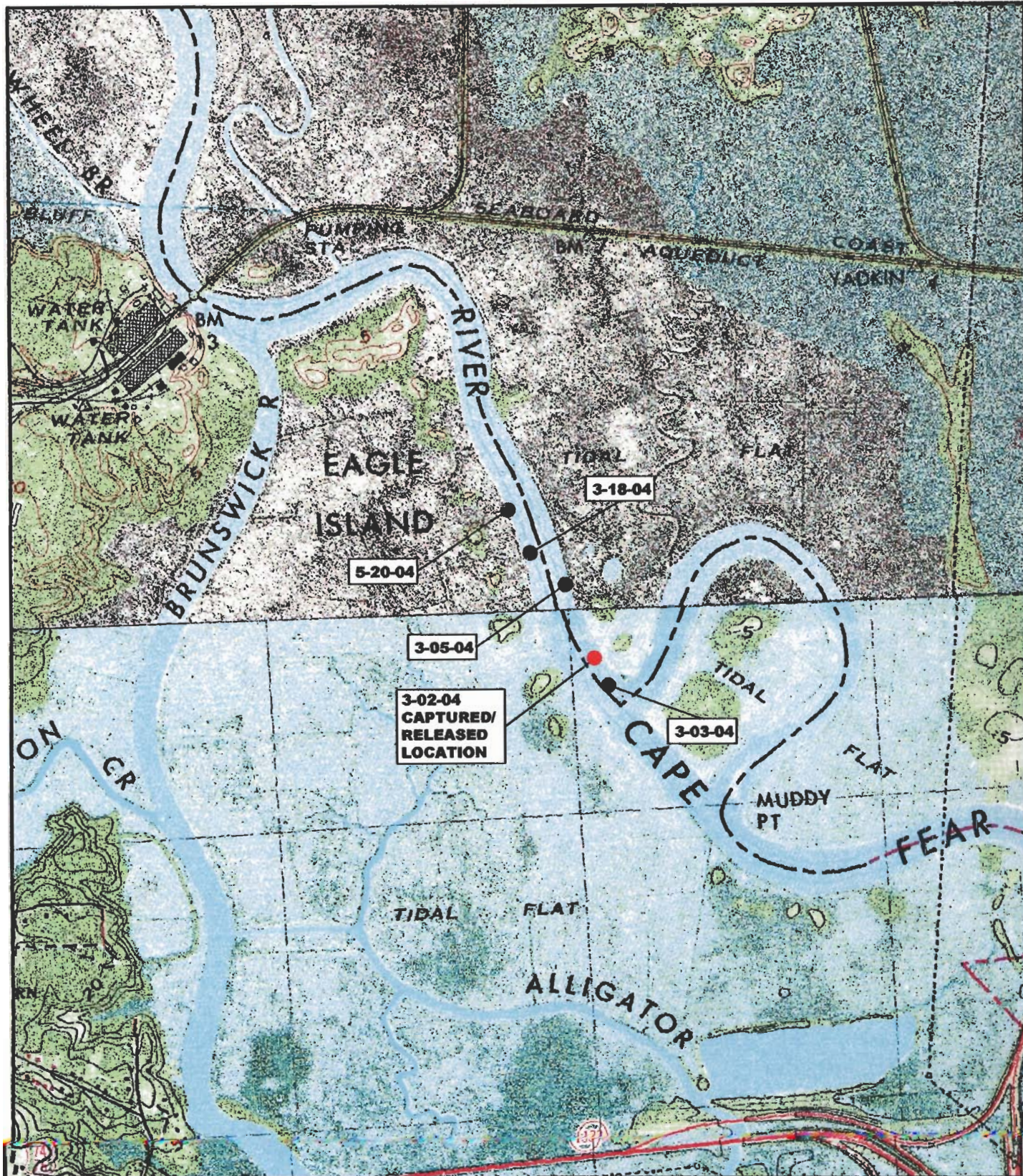
FILE: CZR5232-04



4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5233

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/05/04

FILE: CZR5233-04

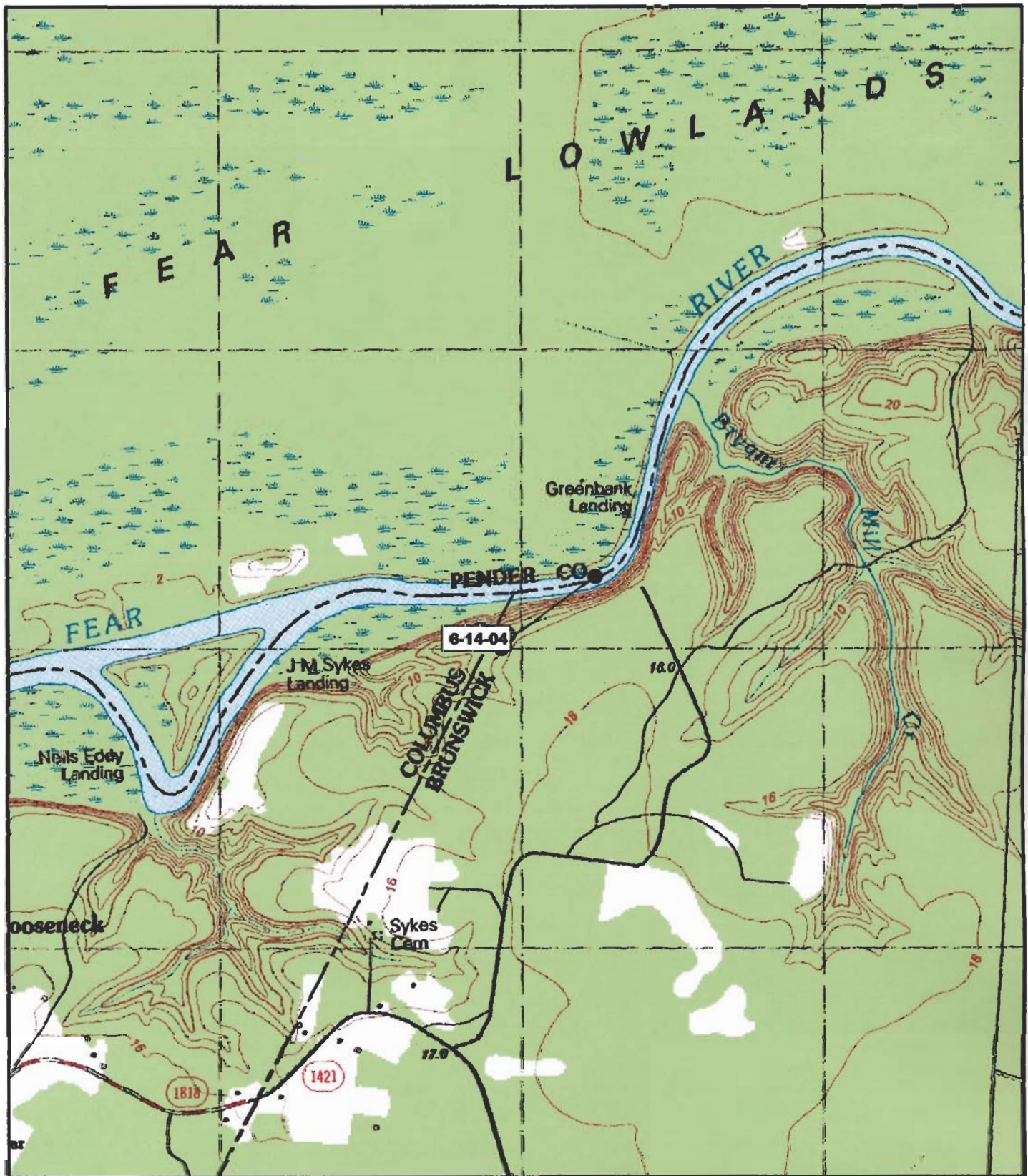


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

1 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5233

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLD/TJB

DATE: 8/05/04

FILE: CZR5233-04

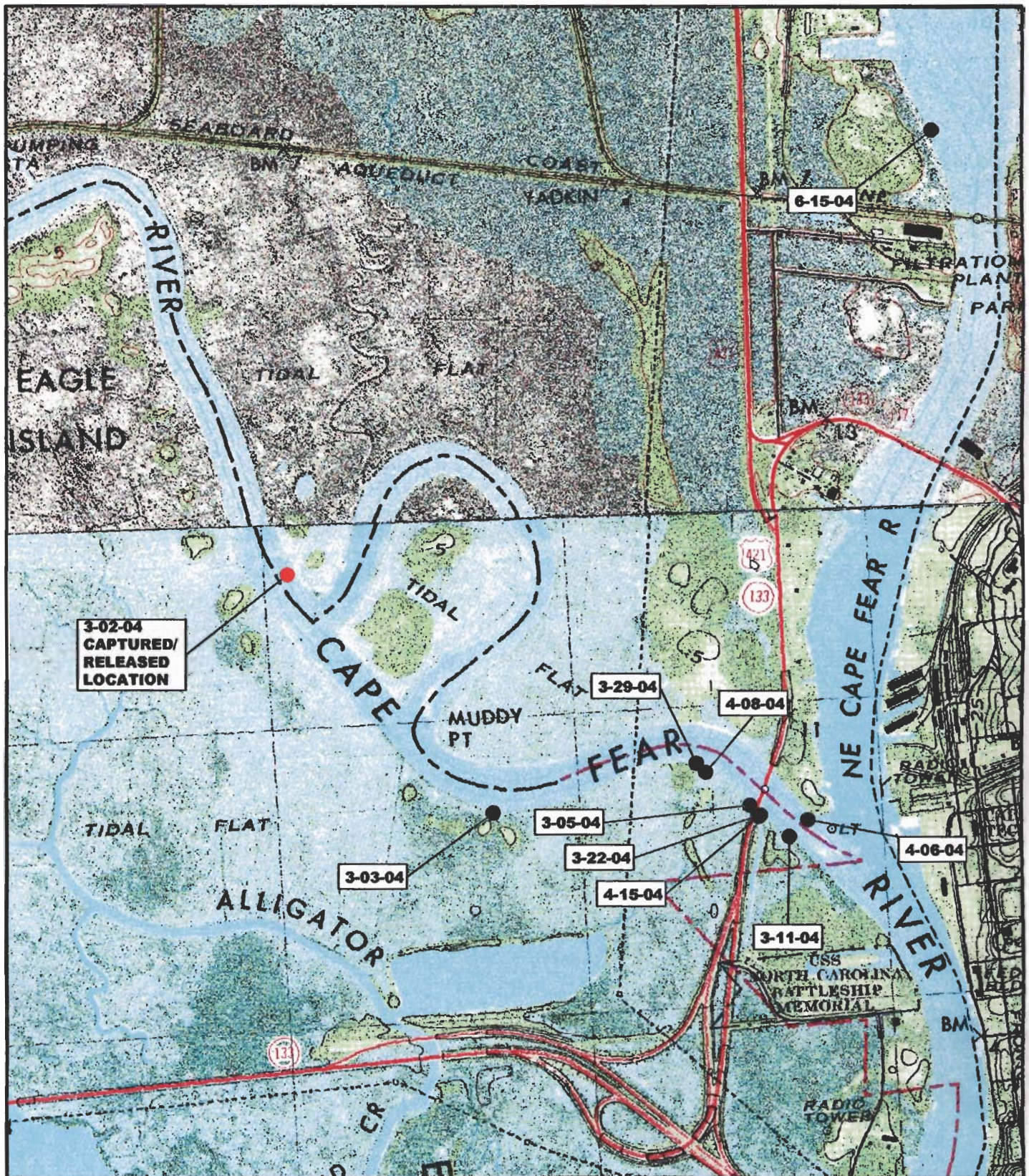


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5234**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

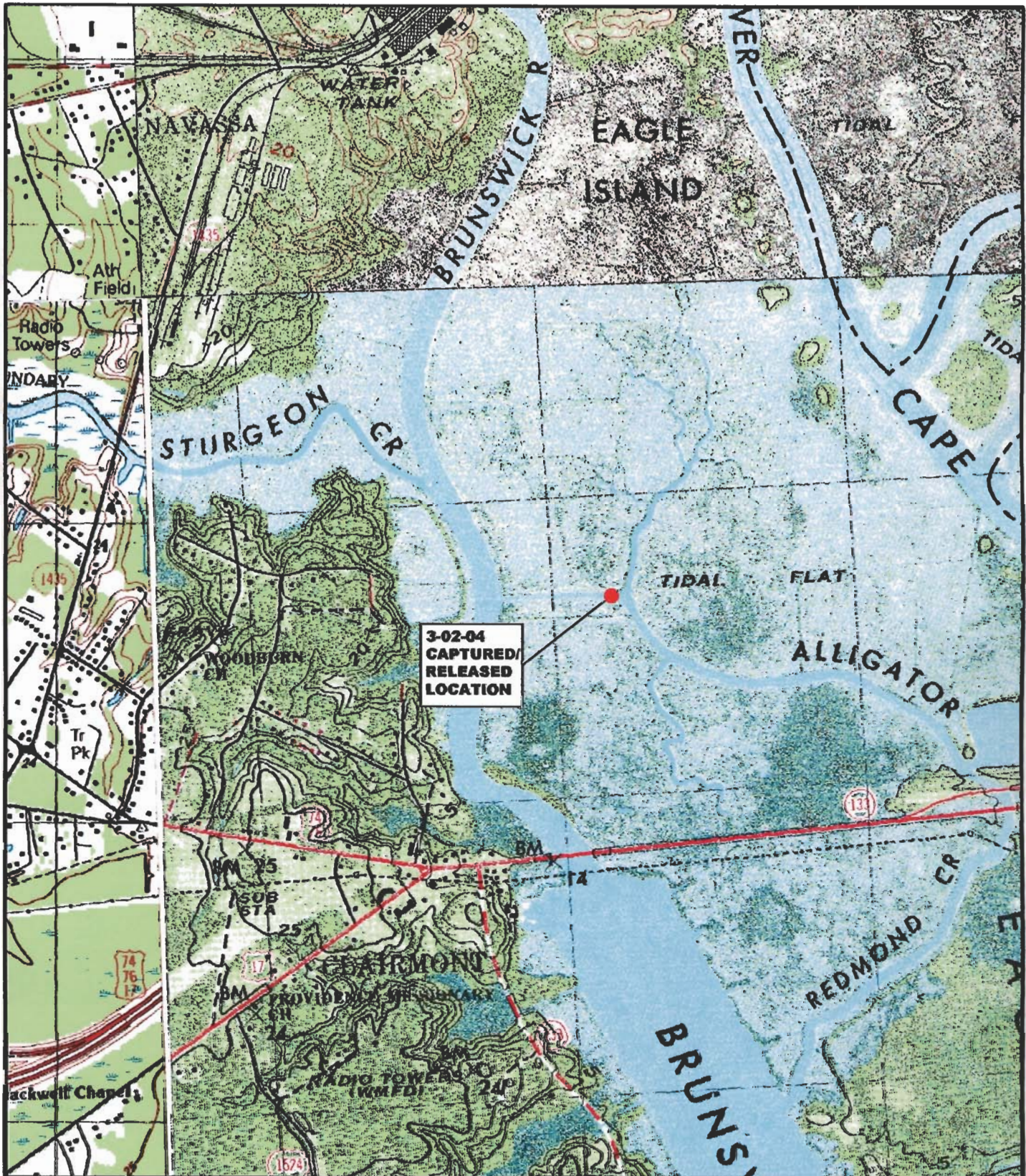
FILE: CZR5234-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5235

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/09/04

FILE: CZR5235-04

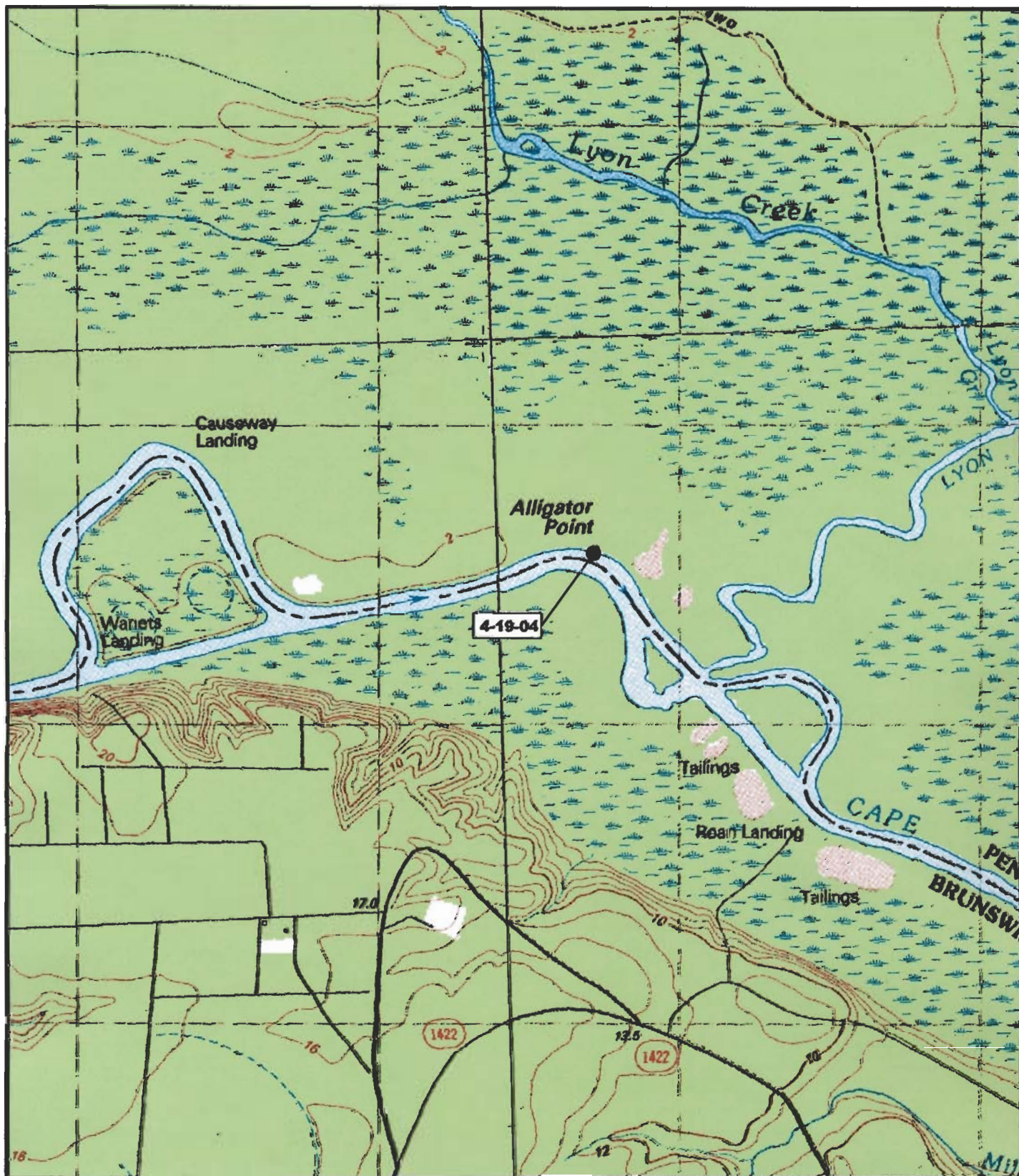


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5235**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB

DATE: 8/09/04

FILE: CZR5235-04

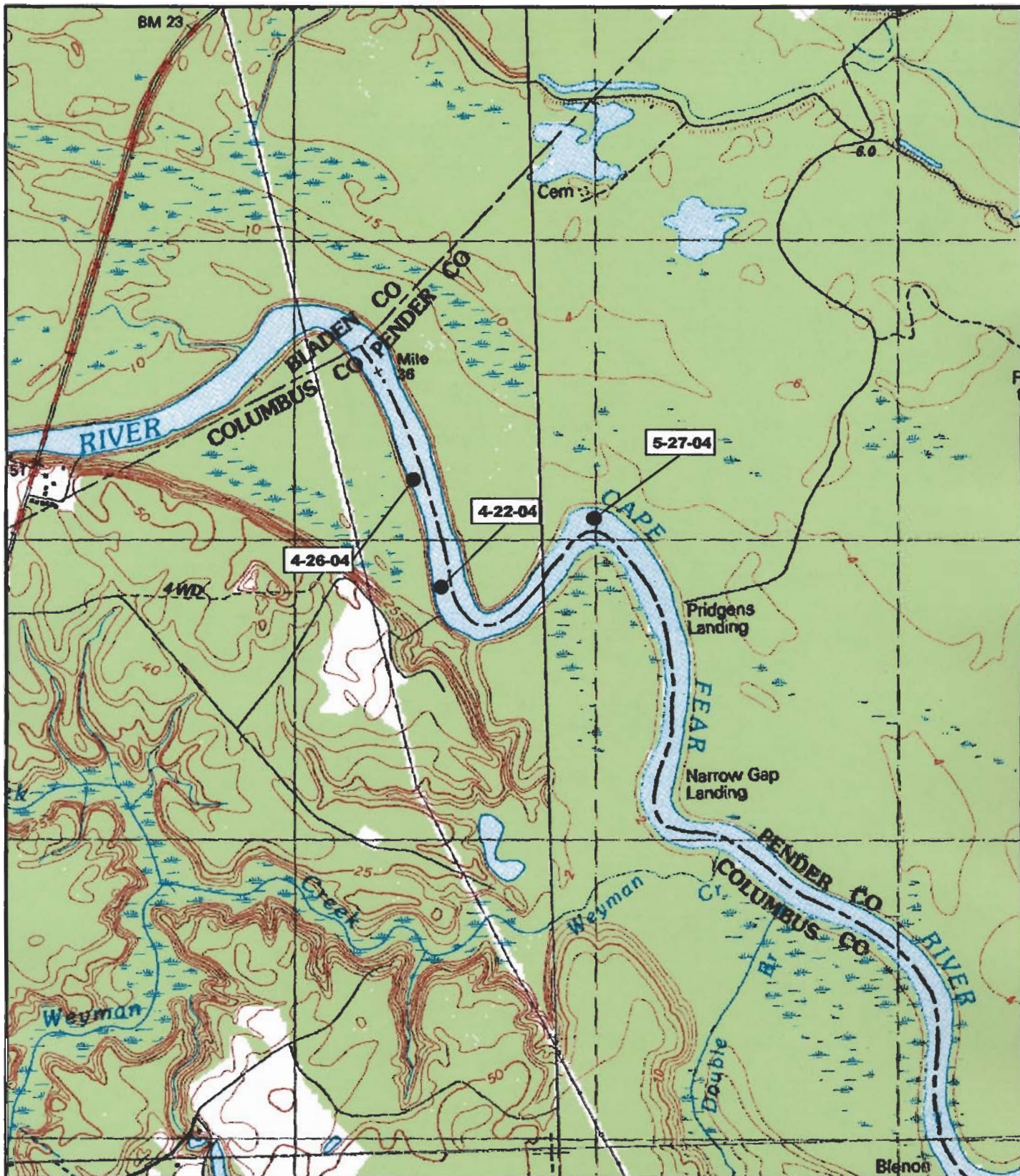


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5235

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/09/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5235-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 3





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5236

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/09/04

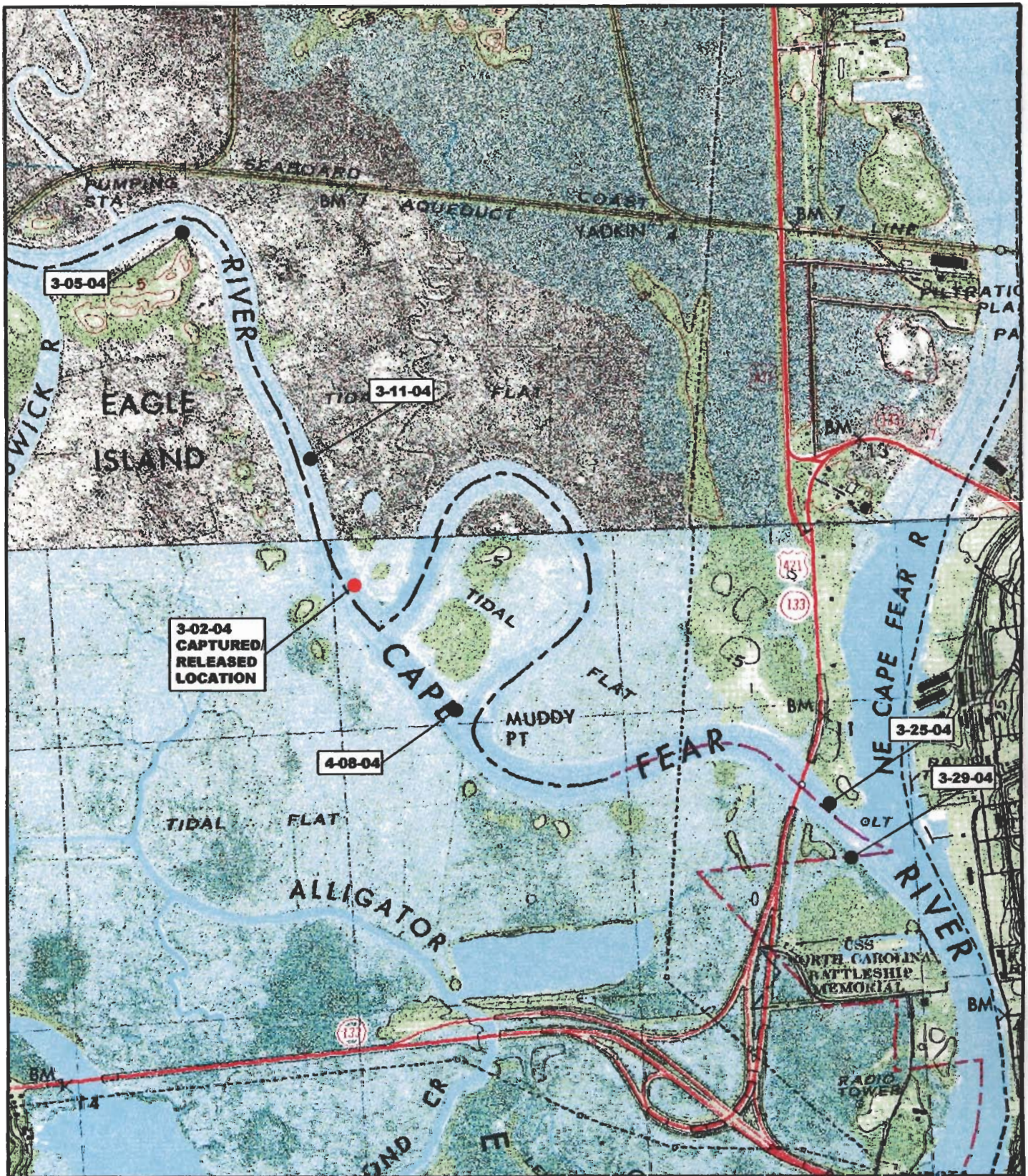
FILE: CZR5236-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1600 3200  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5237

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/09/04

FILE: CZR5237-04

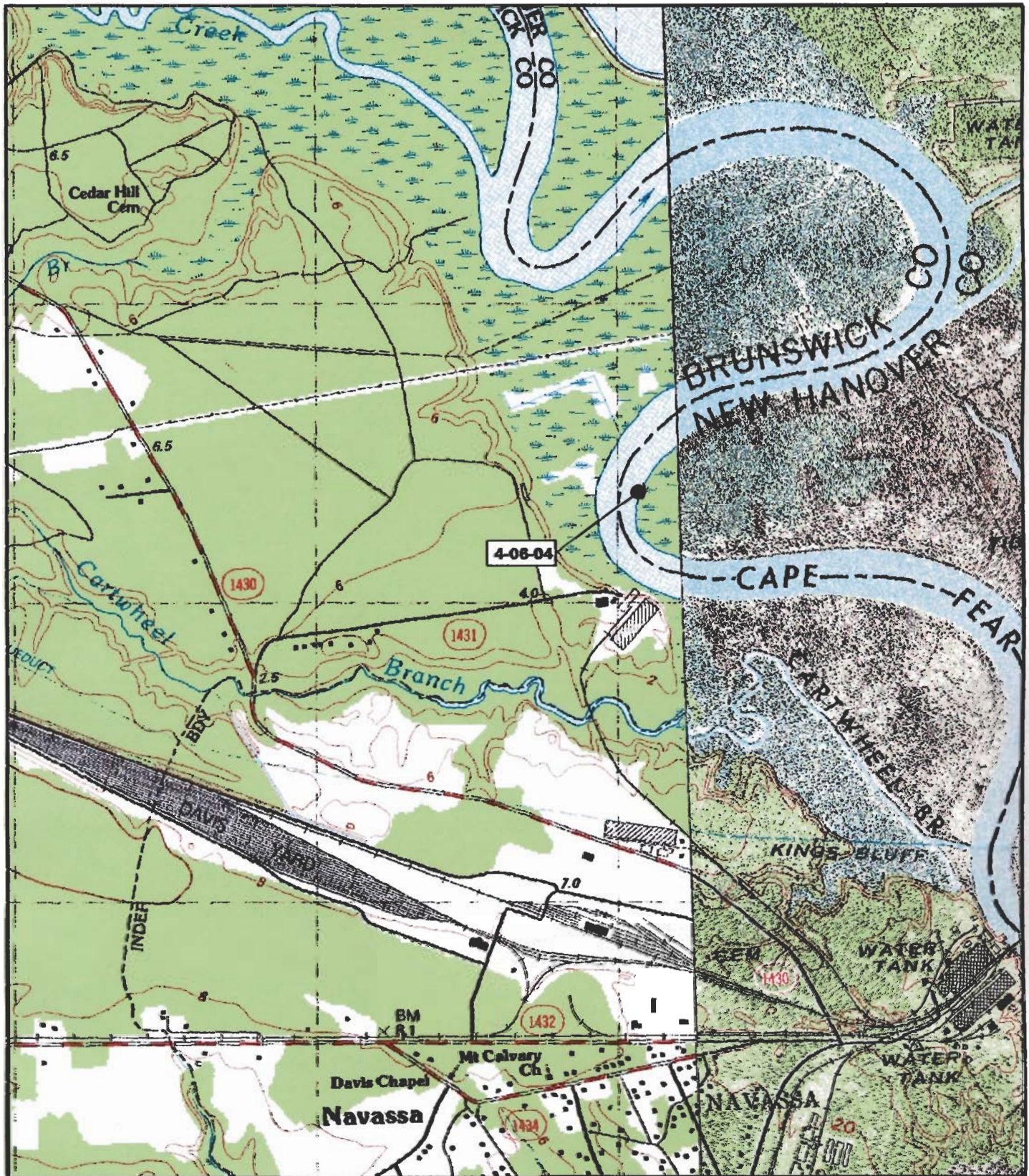


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 4





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5237

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/09/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5237-04

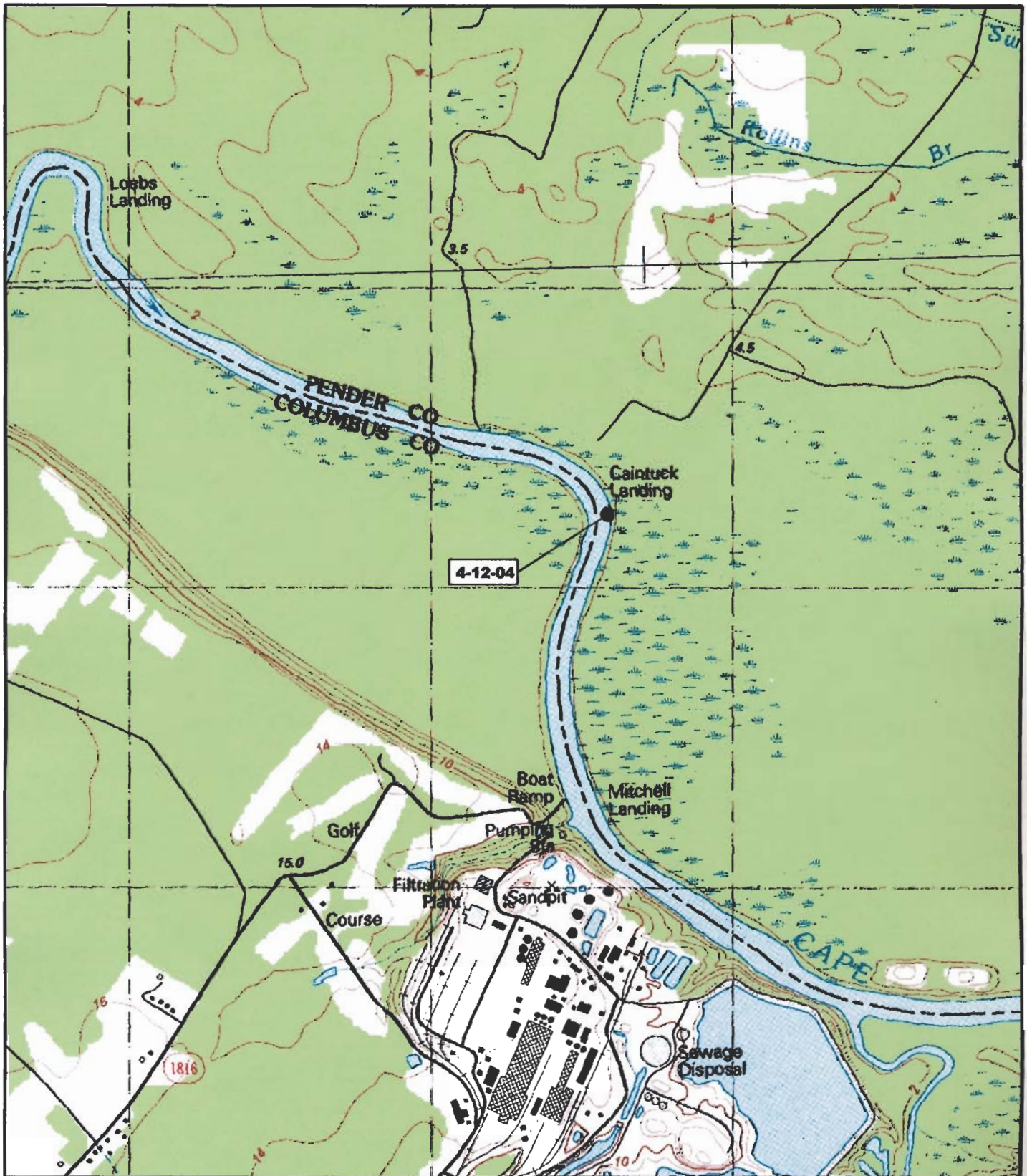


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5237

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/09/04

FILE: CZR5237-04

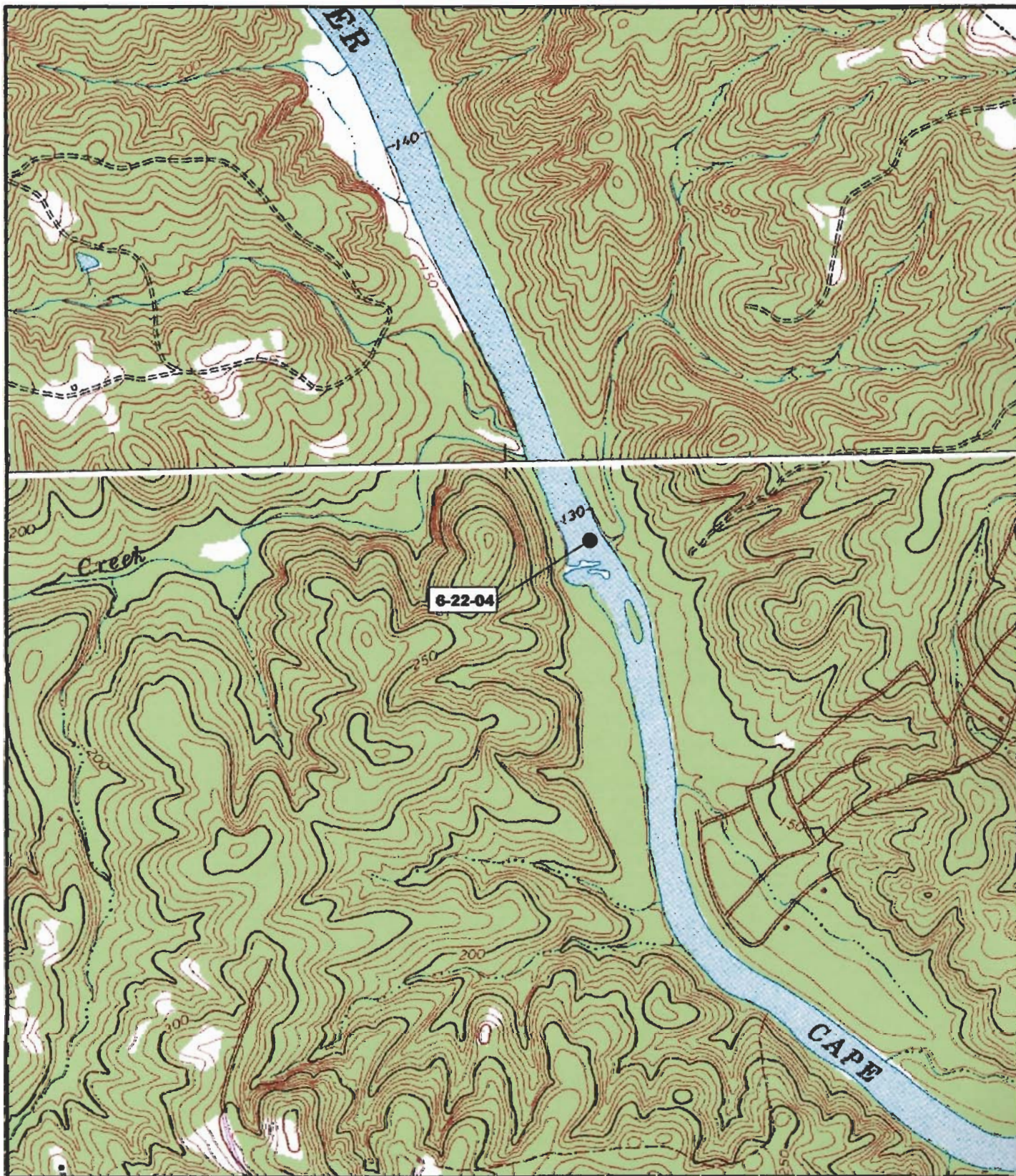


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5237**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/09/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5237-04

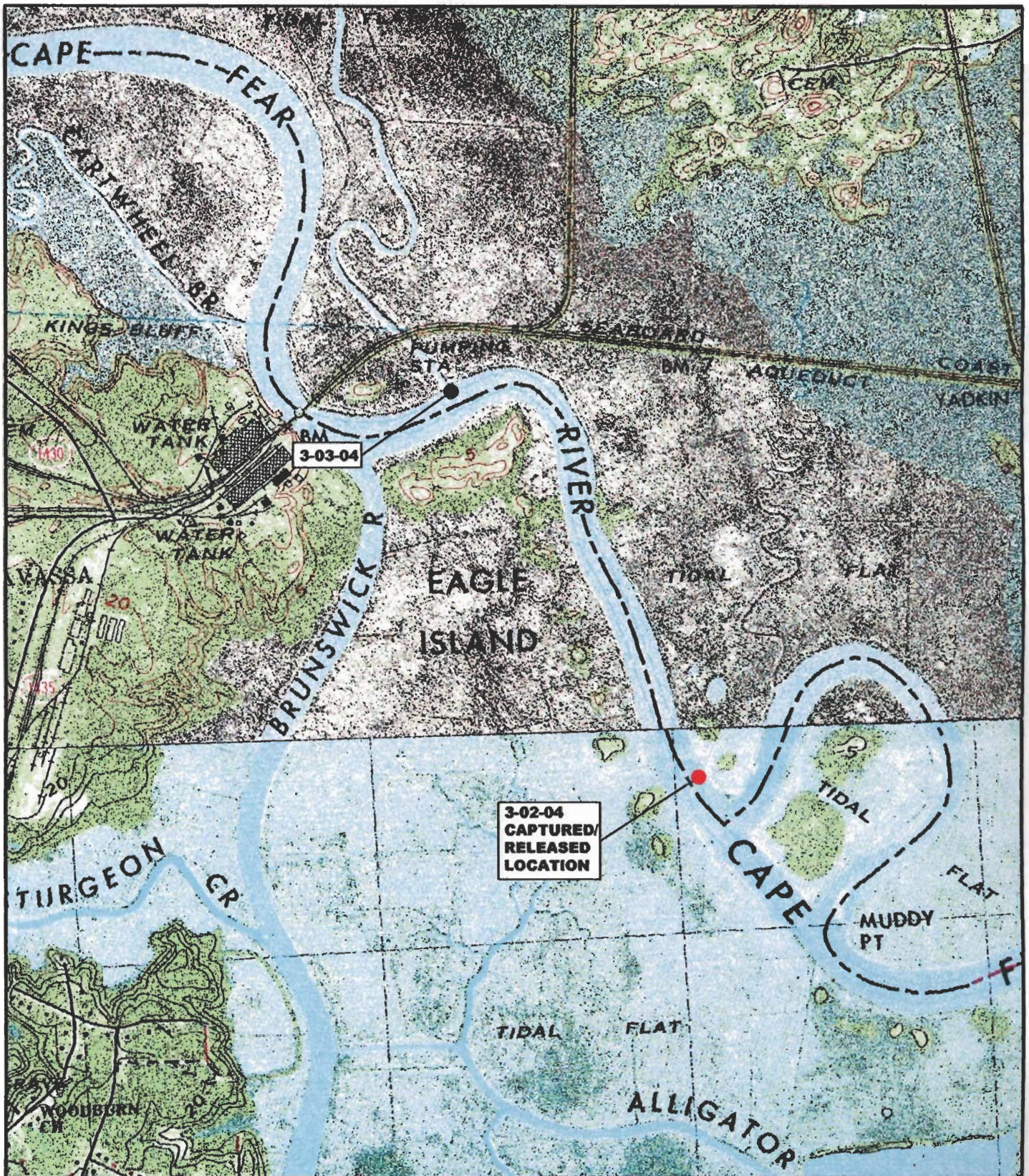


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 OF 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5238

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5238-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9136

CP#1976.00

1 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-02-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5238**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

*nm*

FILE: CZR5238-04

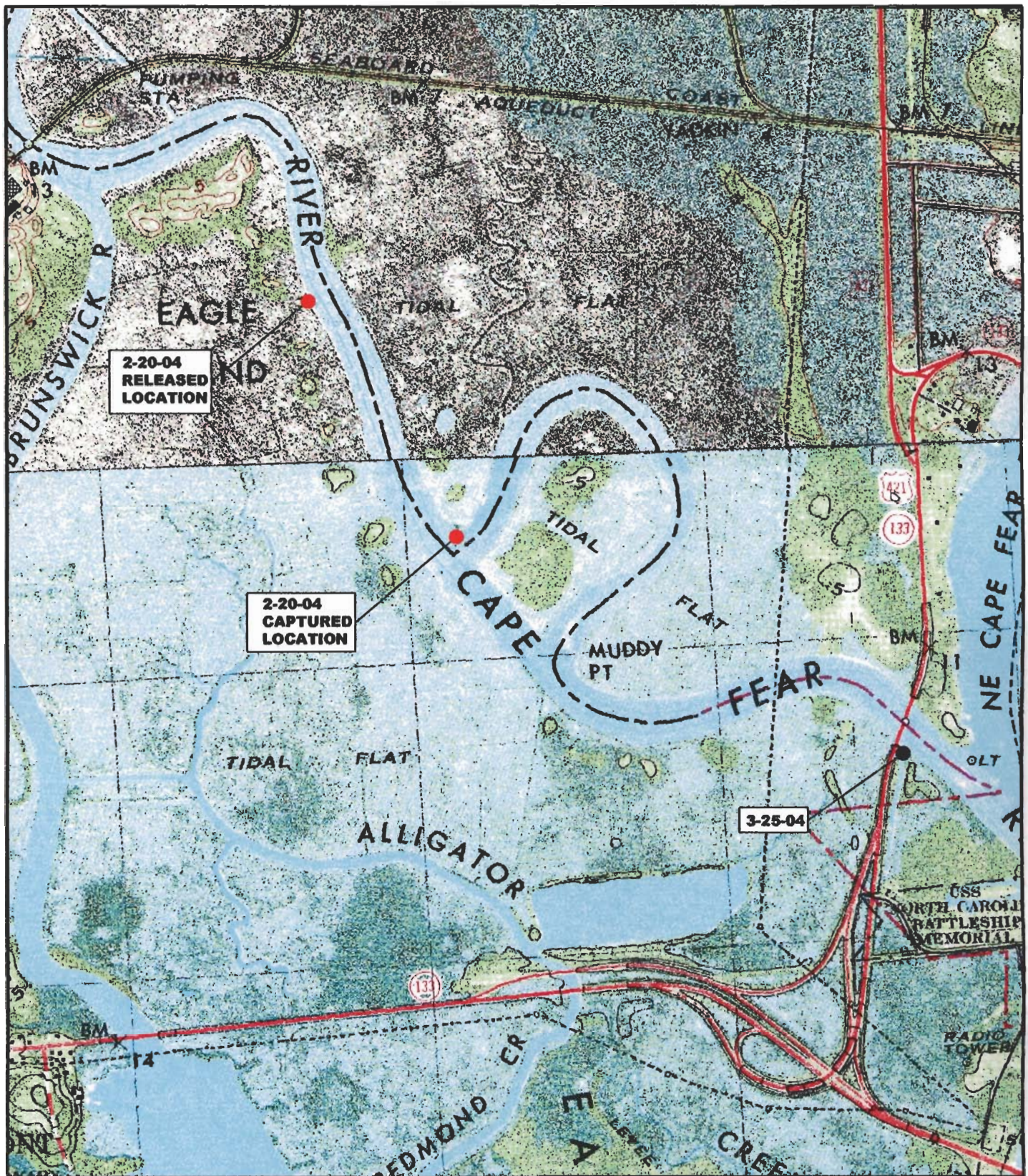


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS  
CZR5239**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/09/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

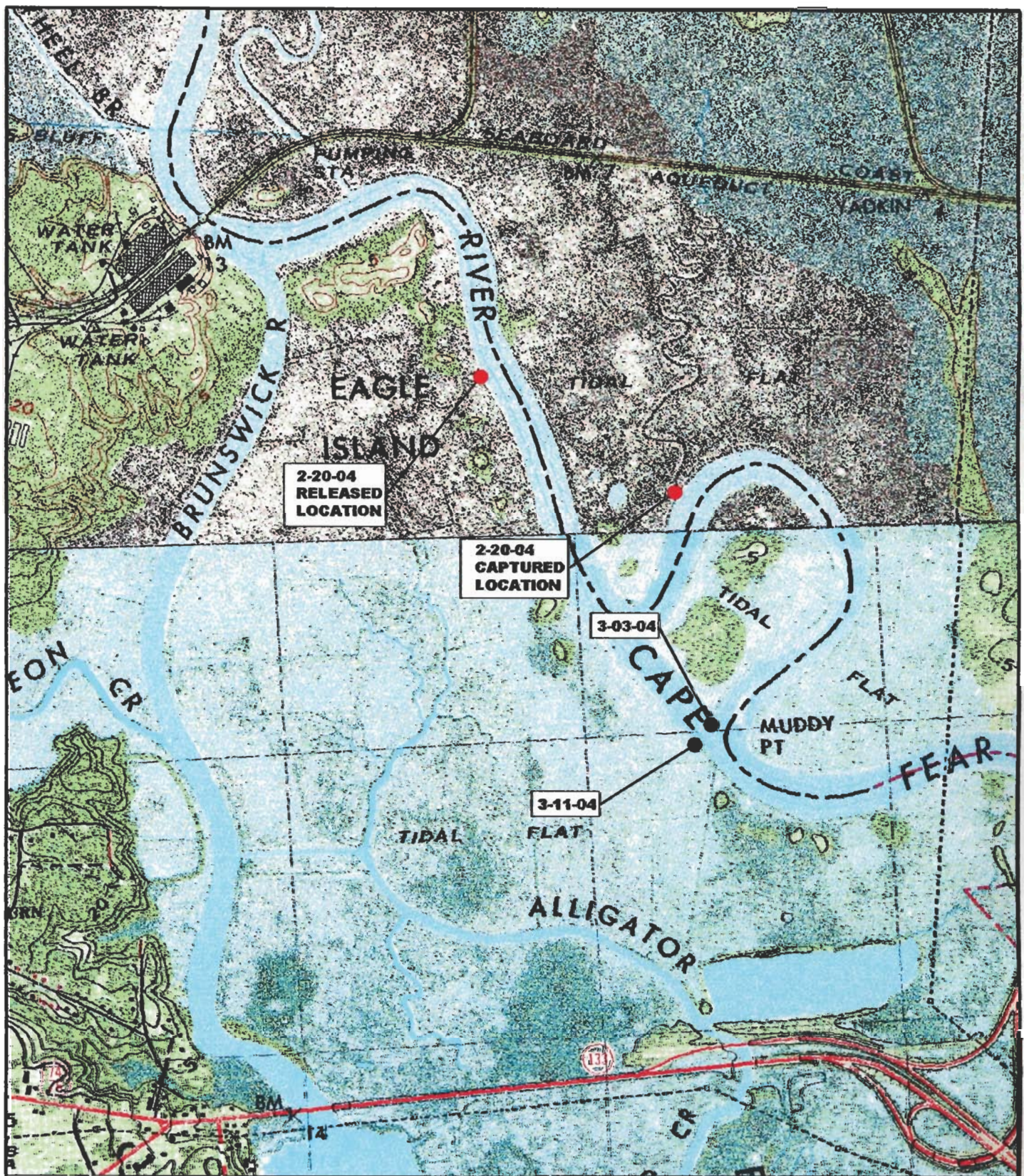
FILE: CZR5239-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5240

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/26/04

APPROVED BY

DRAWN BY: TLJ/TJB

FILE: CZR5240-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9135

CP#1976.00

1 of 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5240

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/11/04

FILE: CZR5240-04

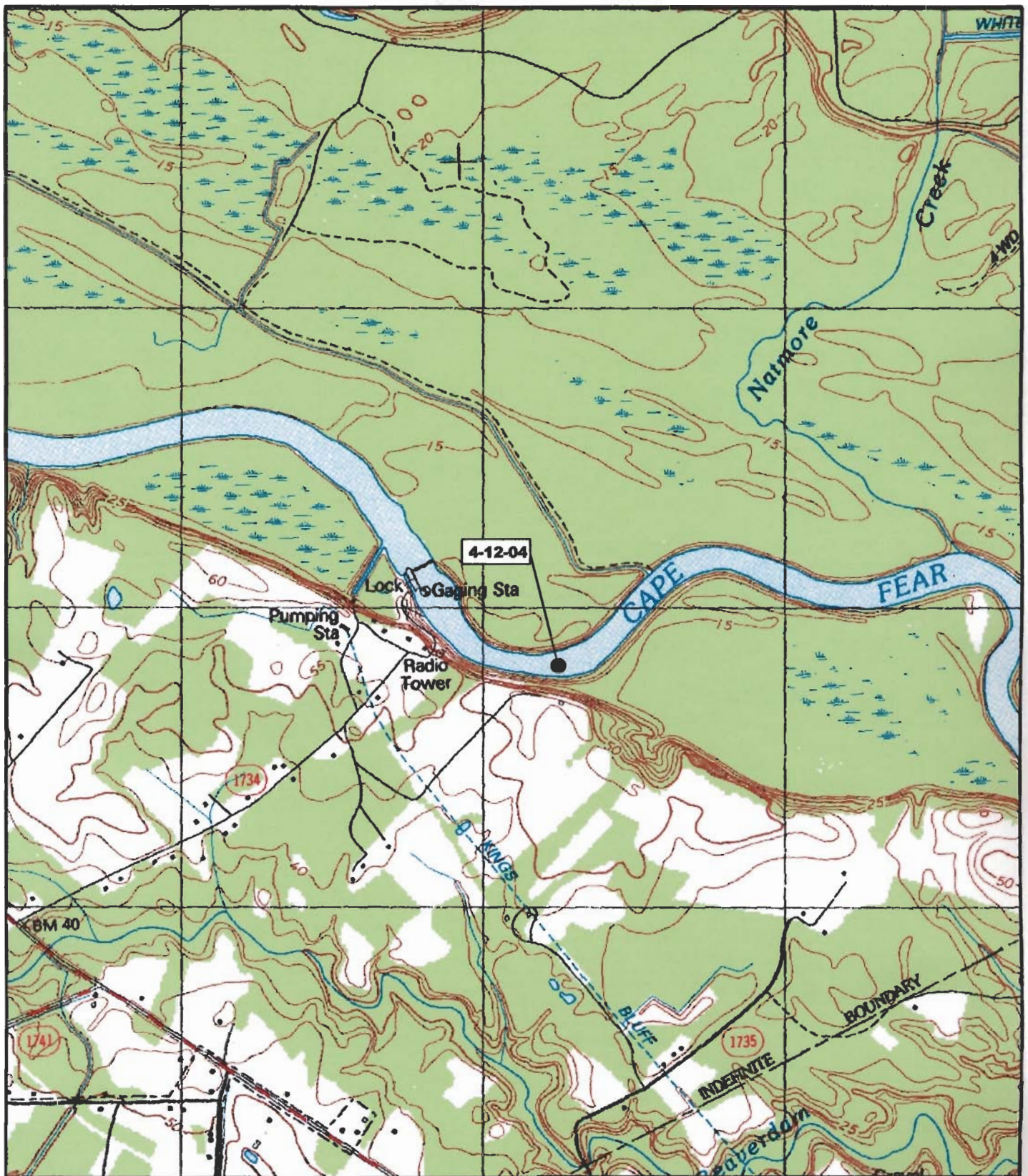


4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED STRIPED BASS**  
**CZR5240**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5240-04

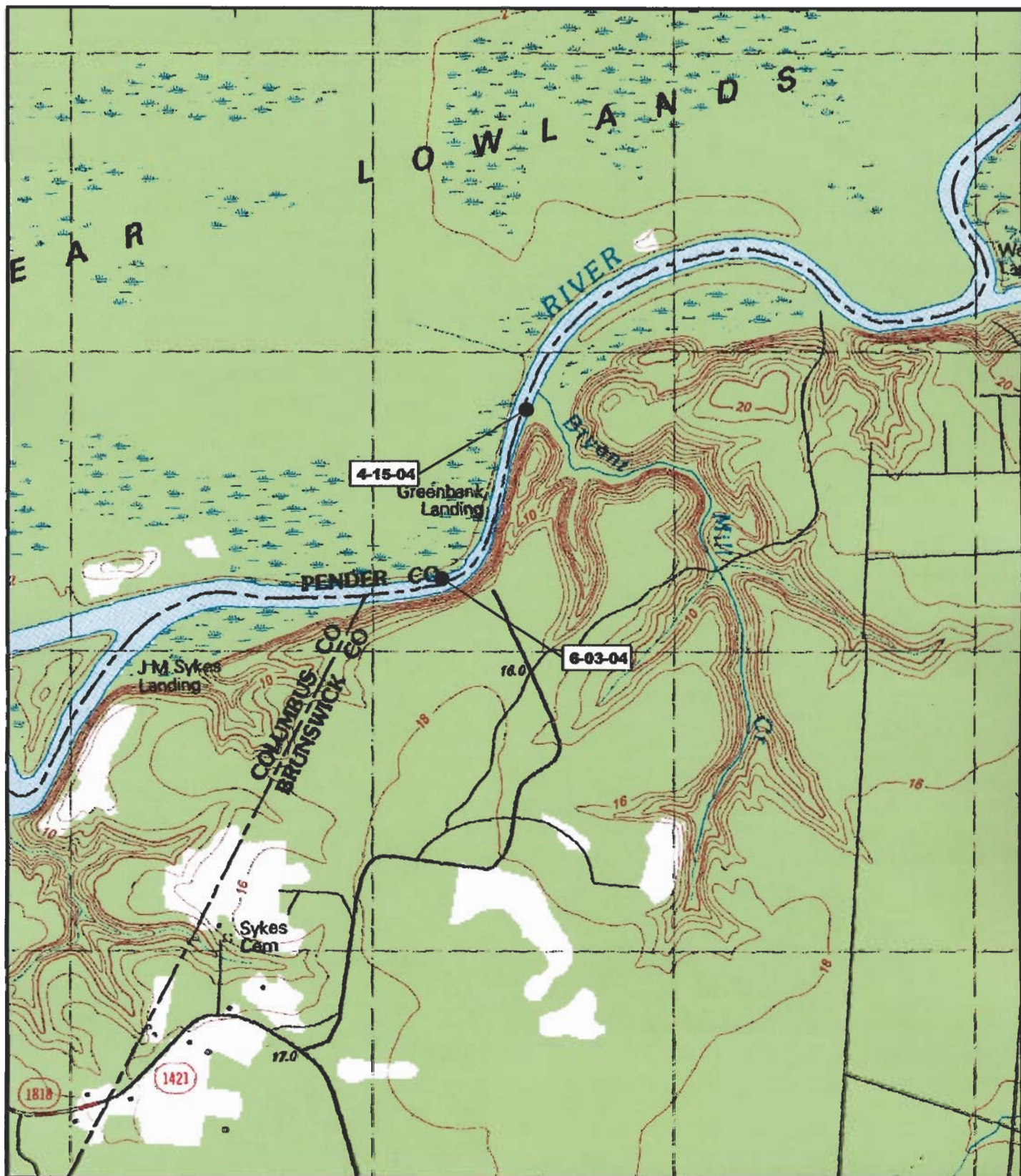


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

3 of 4





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 2-20-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED STRIPED BASS  
CZR5240

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5240-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

4 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED SHAD  
CZR5241**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5241-04

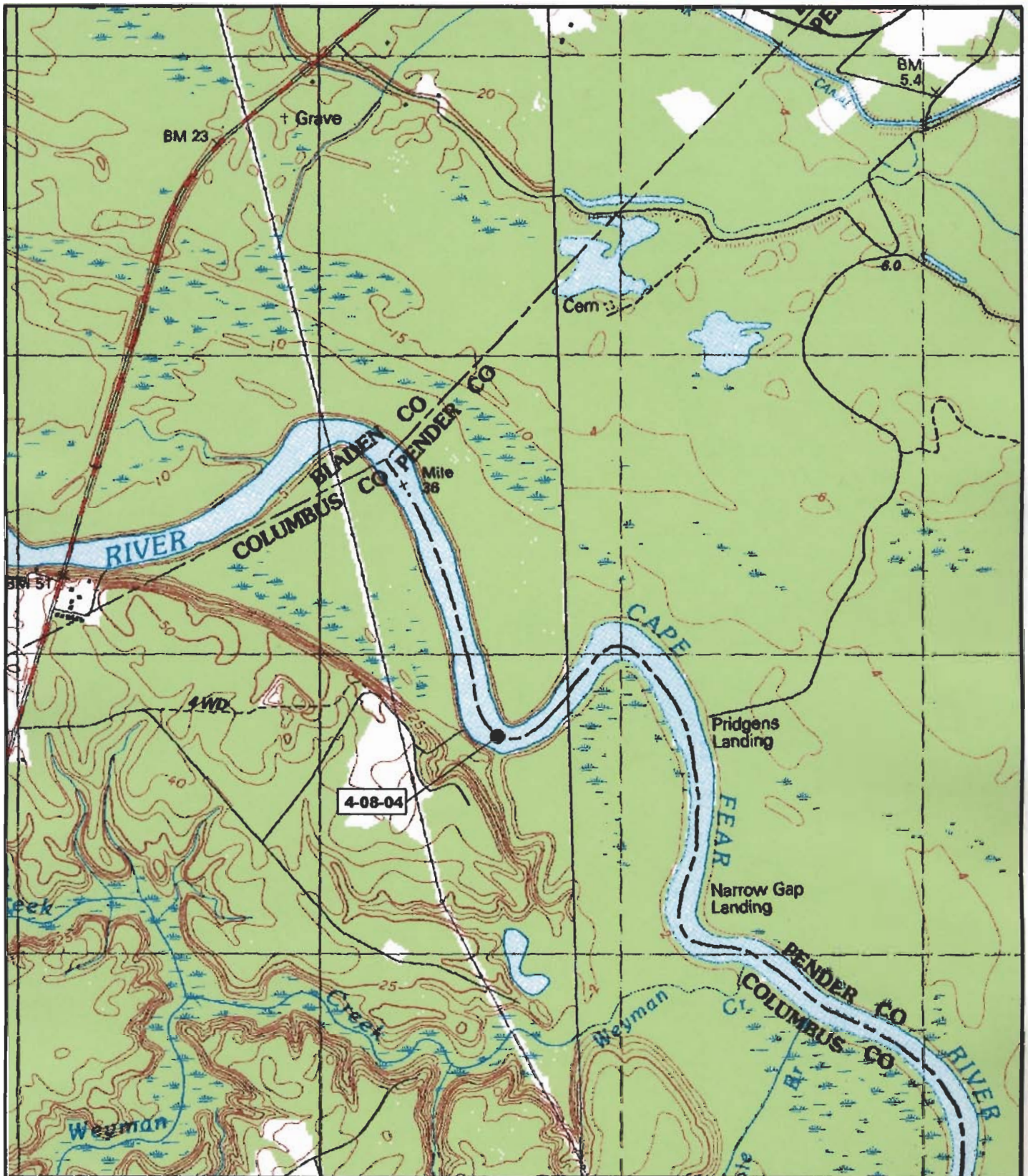


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 3





**LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



SITE OF RELOCATED SHAD  
 CZR5241

**MANUAL FISH TRACKING DATA  
 WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/10/04

APPROVED BY:

*MW*

DRAWN BY: TLJ/TJB

FILE: CZR5241-04

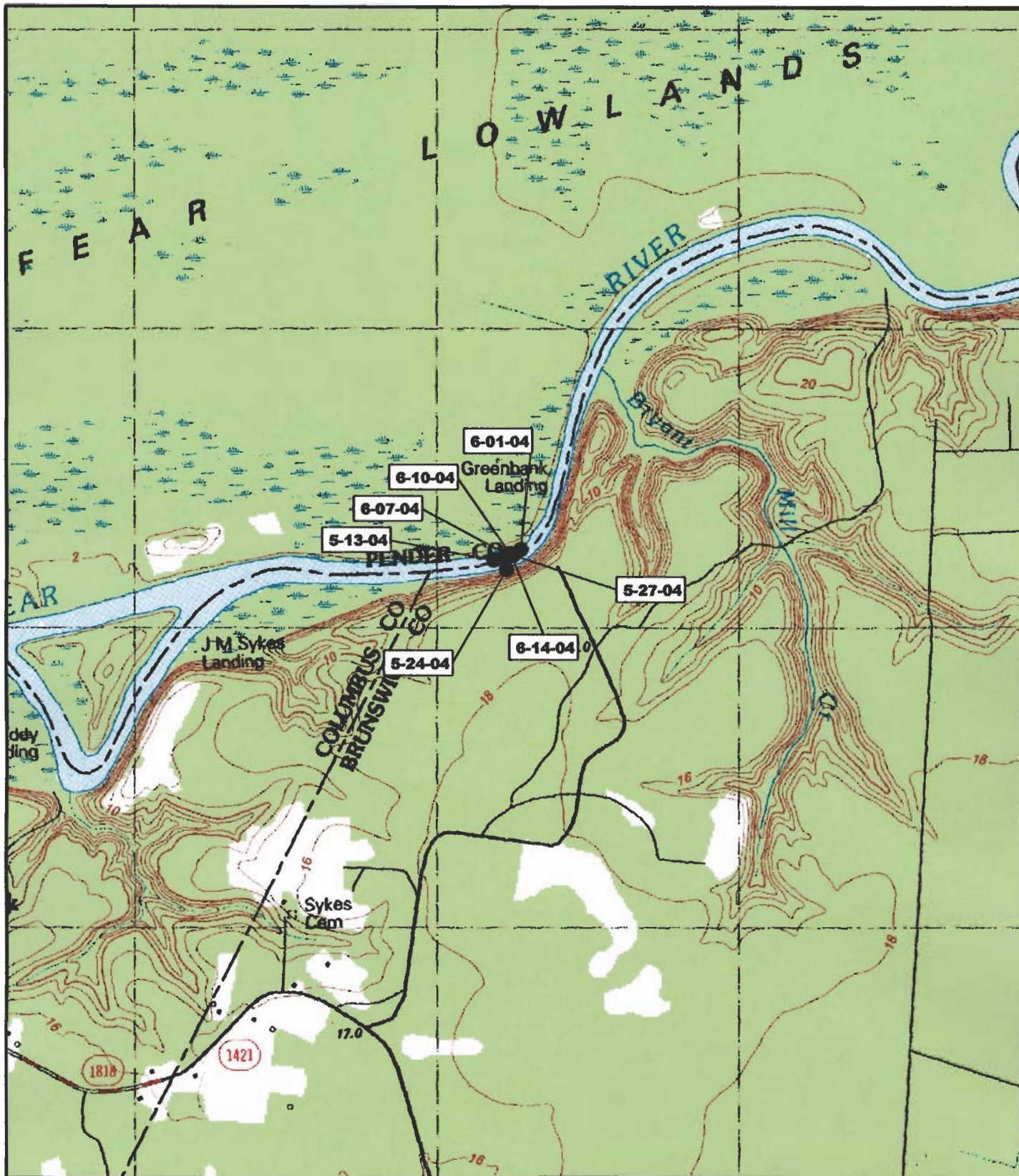


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

2 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED SHAD  
CZR5241

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

*MW*

DRAWN BY: TLJ/TJB  
FILE: CZR5241-04

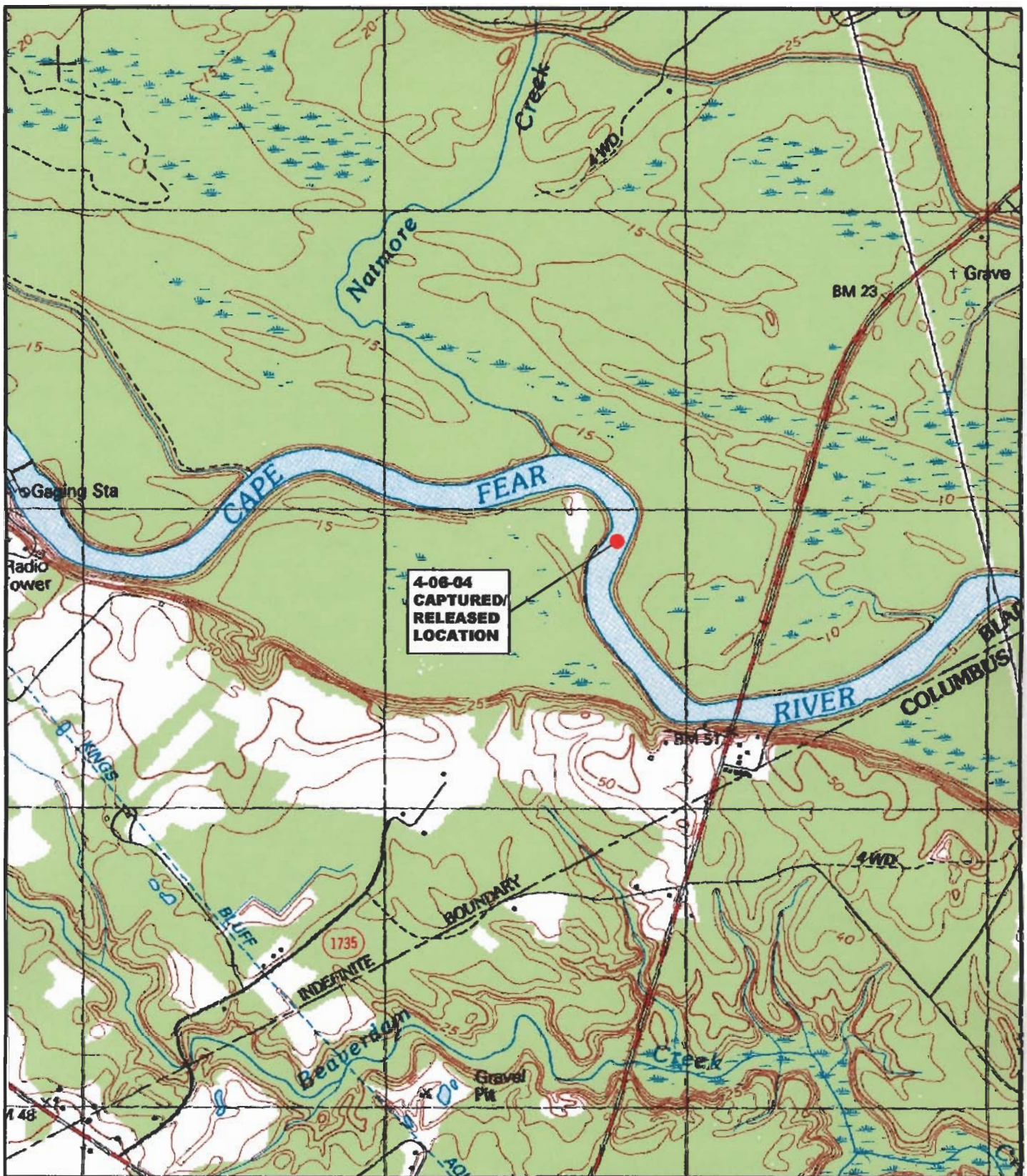


4709 COLLEGE ACRES DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-06-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5242**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

DRAWN BY: TJS/TJB

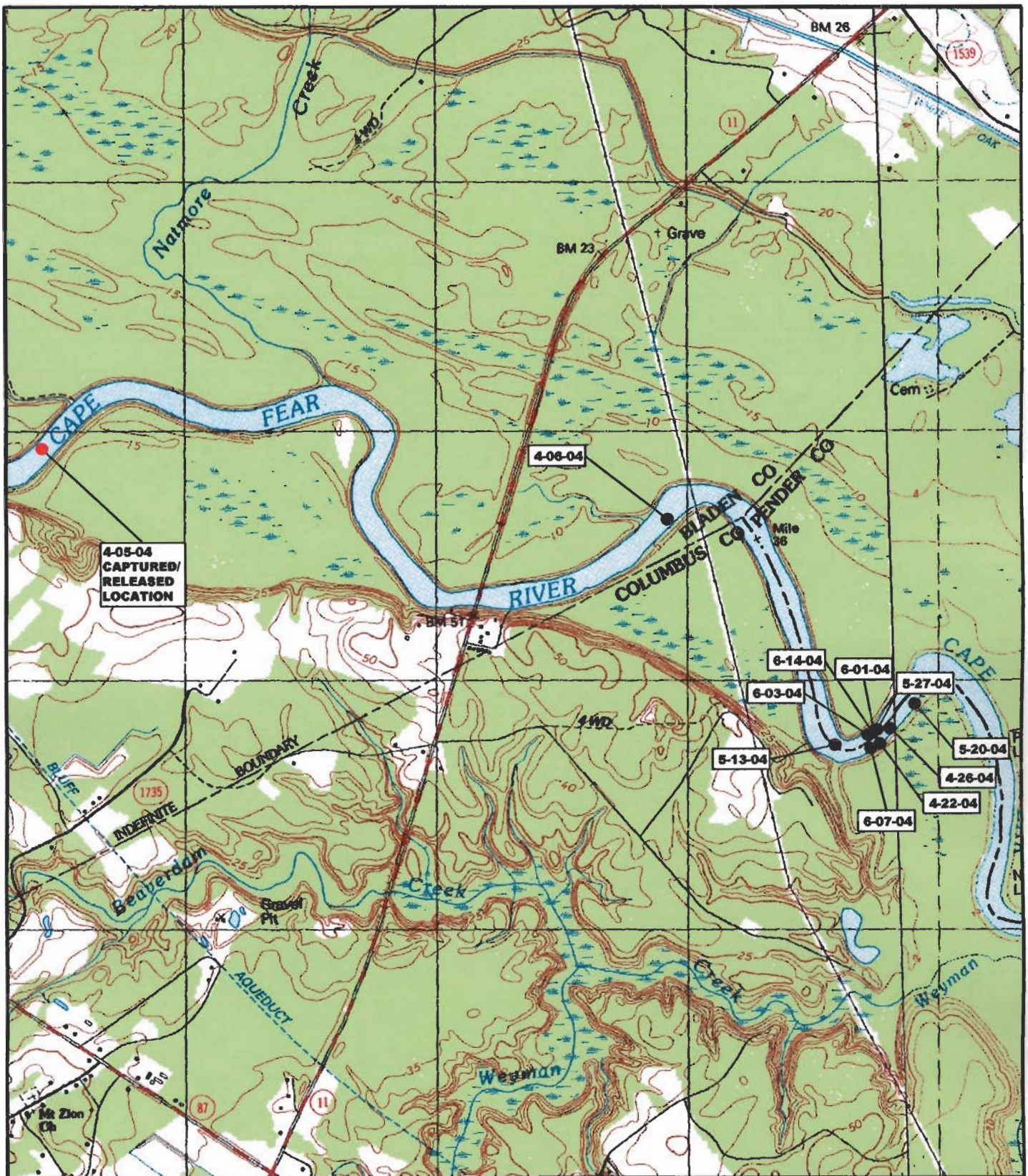
FILE: CZR5242-04

CP#1976.00



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1800 3600  
  
 SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
 CZR5243**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/10/04

APPROVED BY:

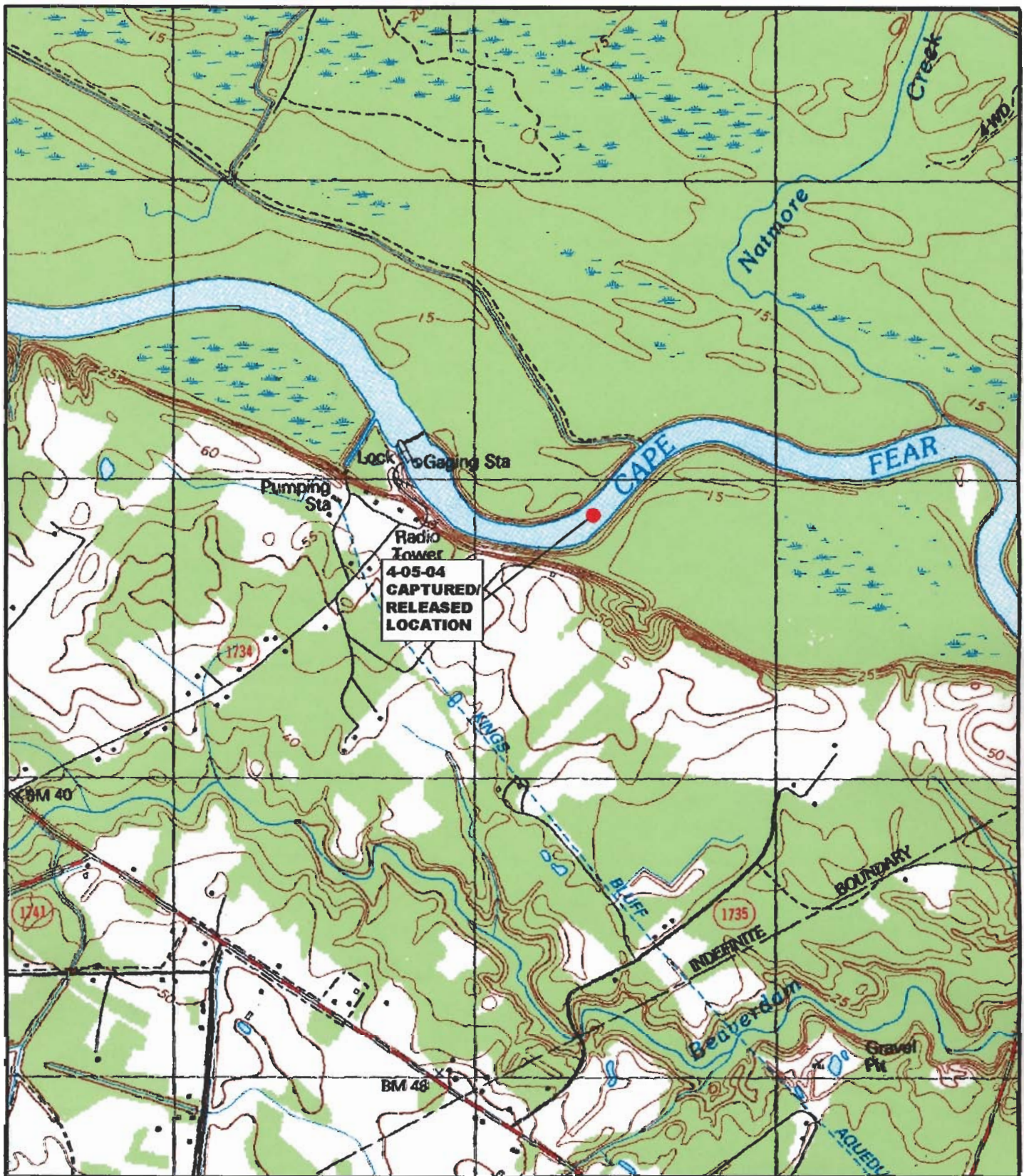
DRAWN BY: TLJ/TJB  
 FILE: CZR5243-04



4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5244**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: 1LI/TJB

FILE: CZR5244-04

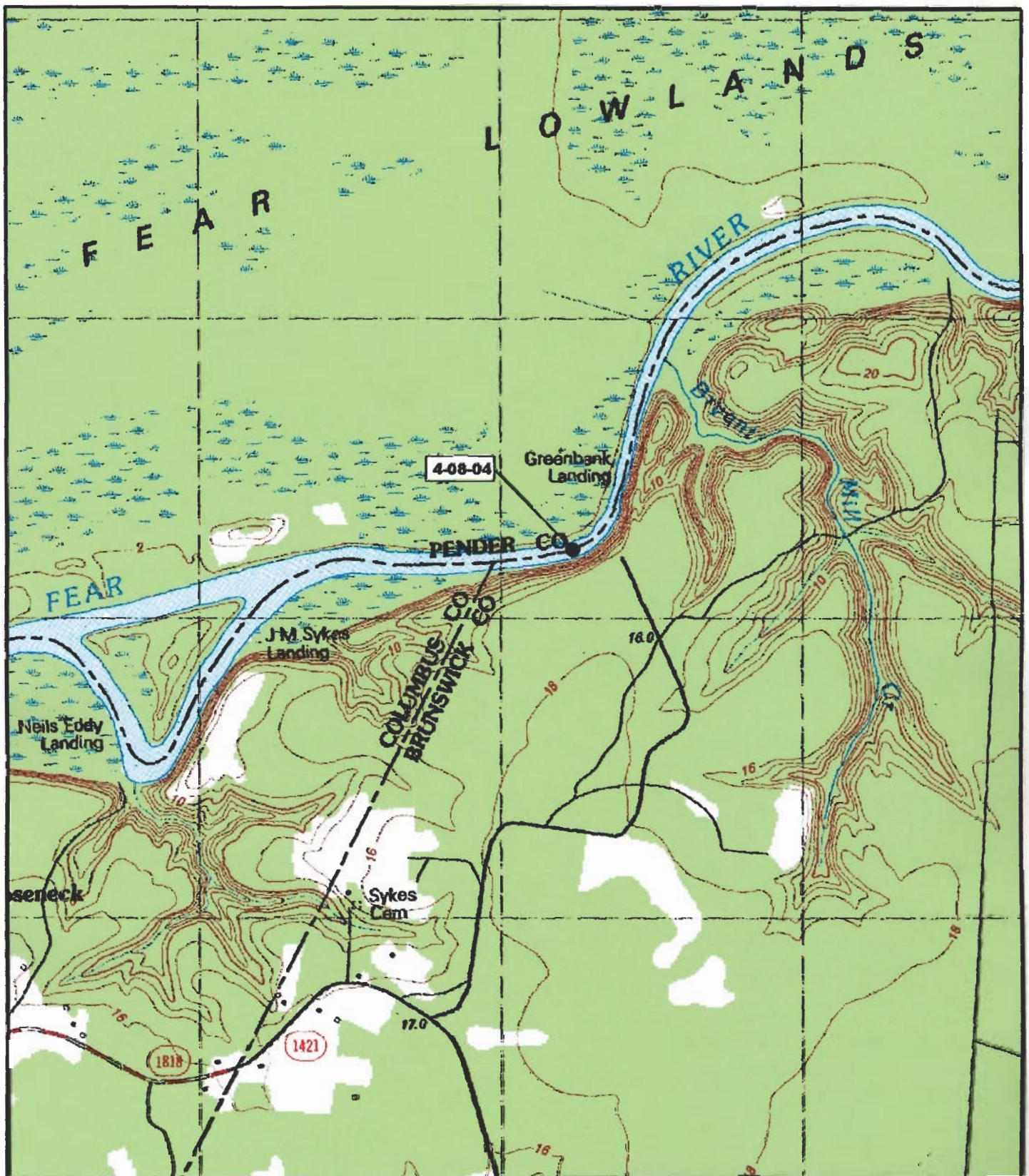


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL. 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000

SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD**  
**CZR5244**

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB

DATE: 8/10/04

FILE: CZR5244-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5245**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5245-04

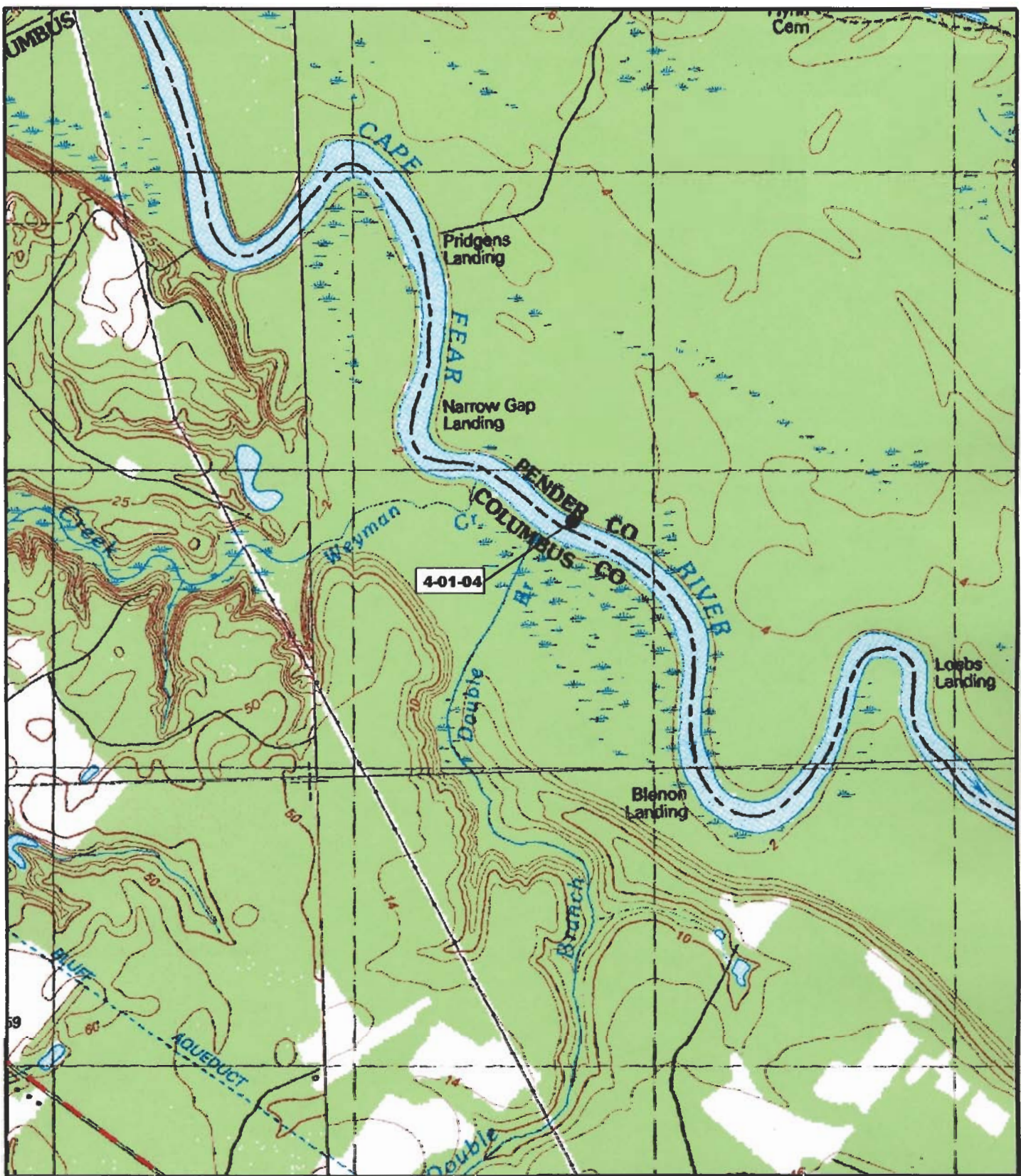


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5245

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/10/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5245-04

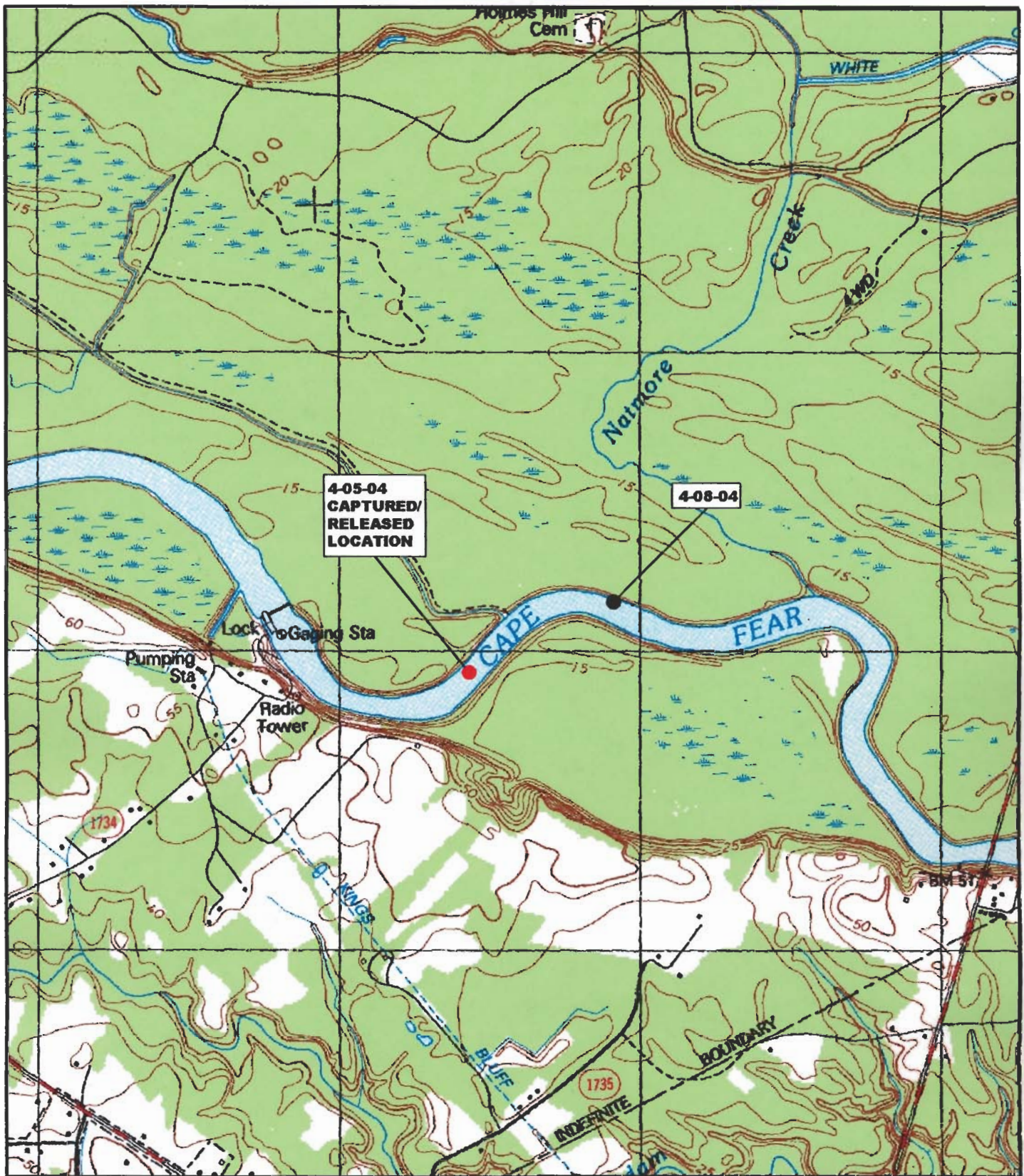


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8253  
FAX 910/382-8138

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000

SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD**  
CZR5246

## **MANUAL FISH TRACKING DATA** **WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/10/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

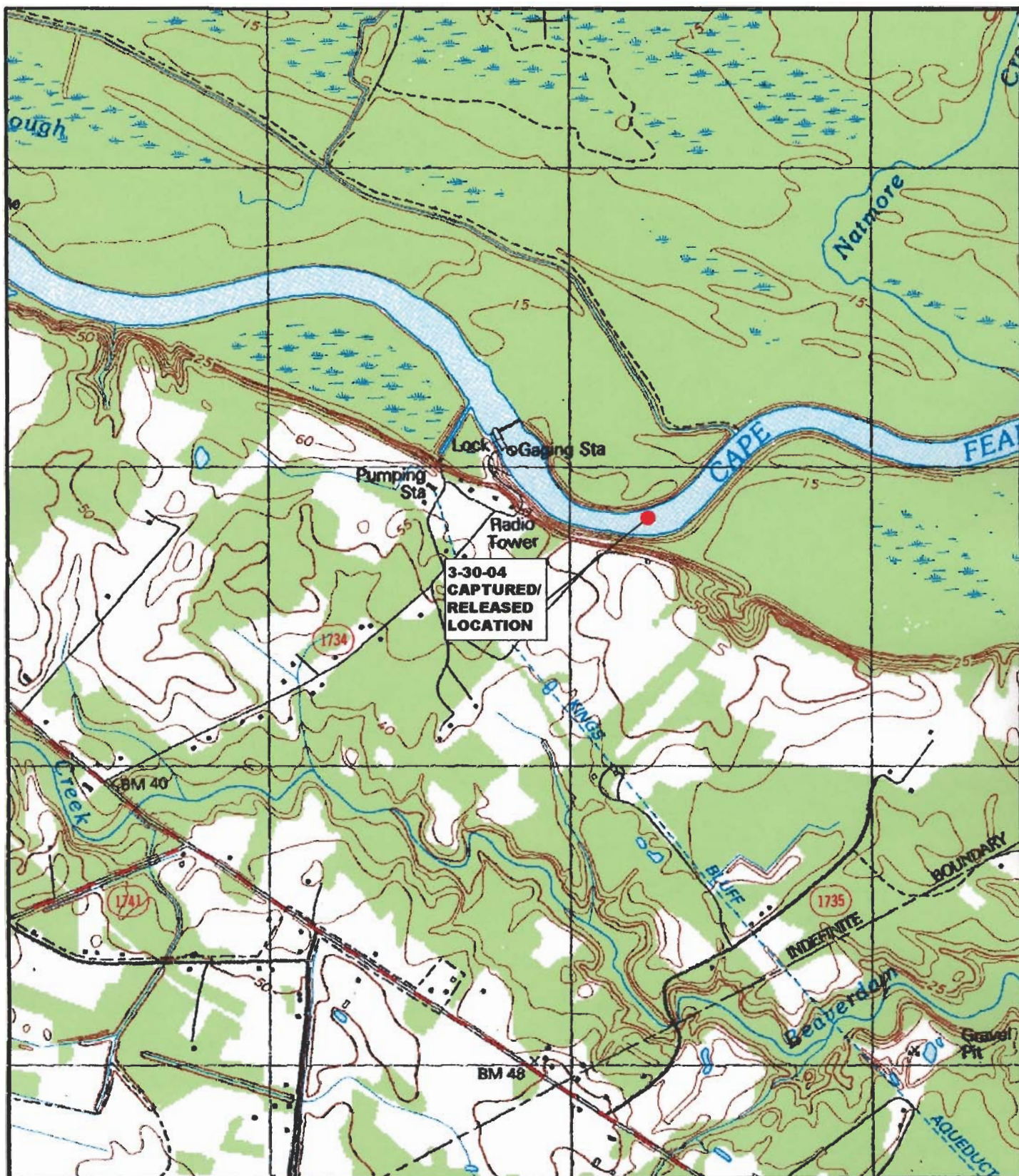
FILE: CZR5246-04



4706 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9283  
FAX 910/382-9139

CP#1976.00





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5247

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/17/04

APPROVED BY:  
*[Signature]*

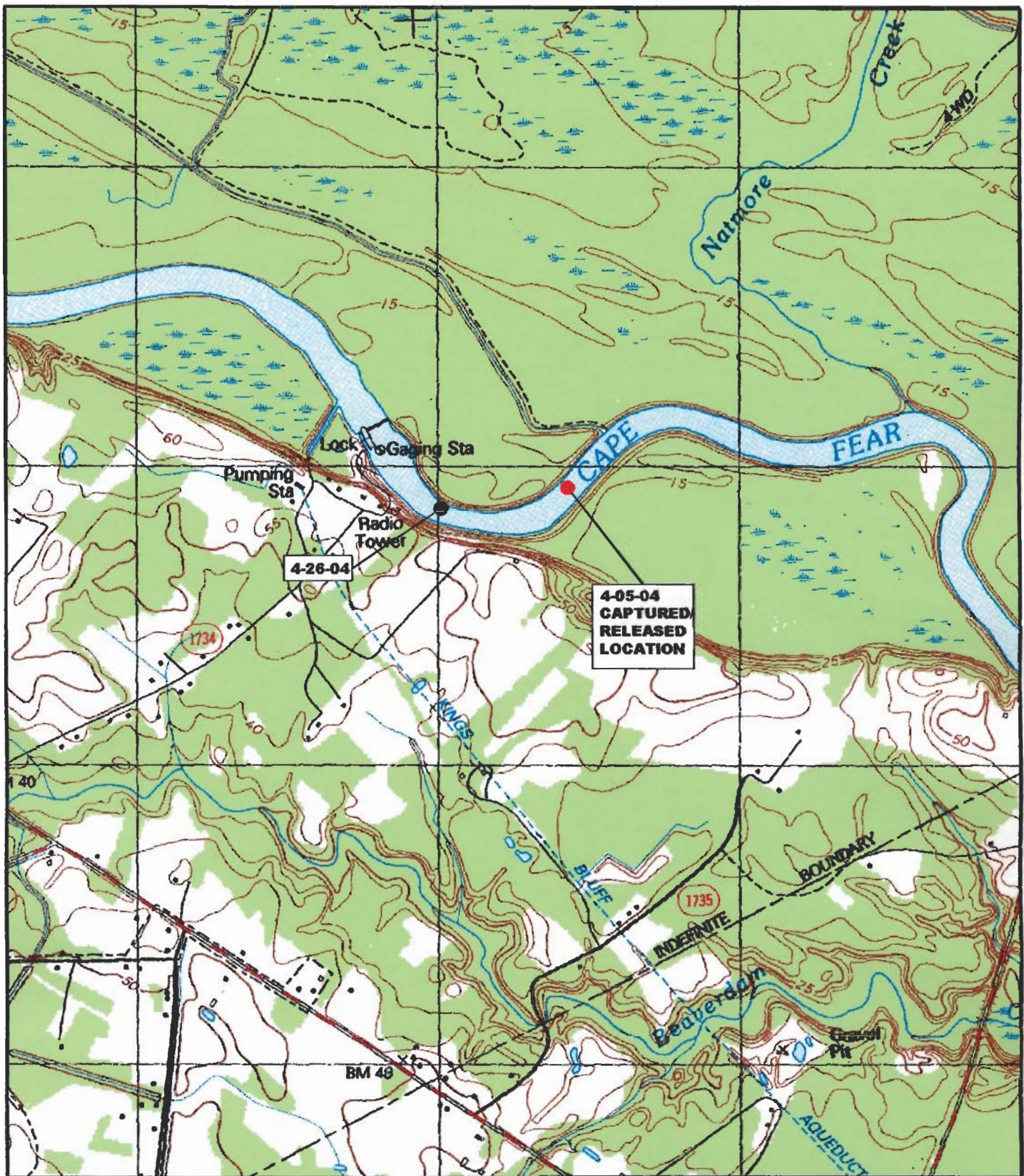
DRAWN BY: TLJ/TJB  
FILE: CZR5247-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5248

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5248-04

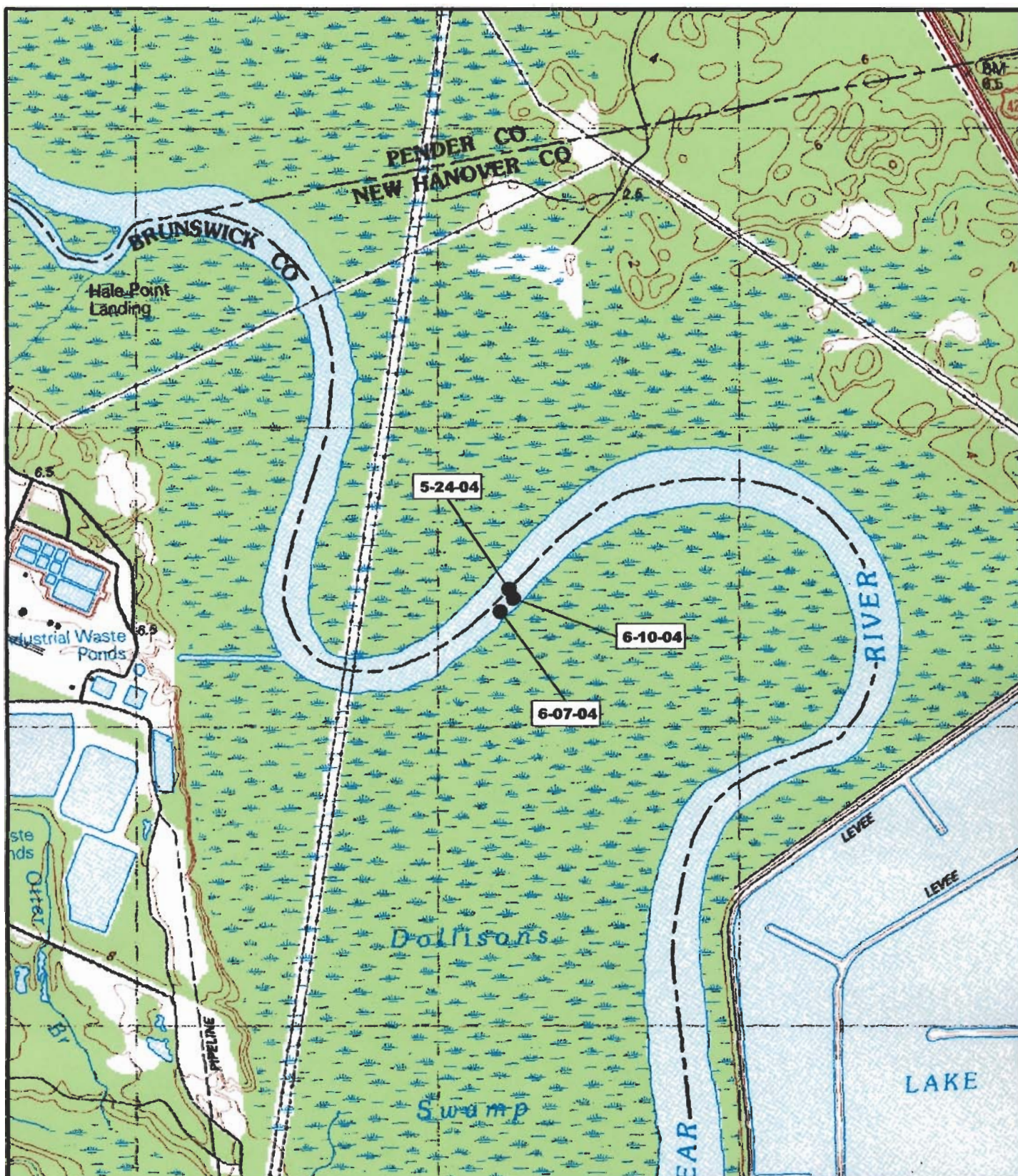


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000



SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5248

## **MANUAL FISH TRACKING DATA WILMINGTON USACE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*Mu*

DRAWN BY: TLJ/TJB

FILE: CZR5248-04

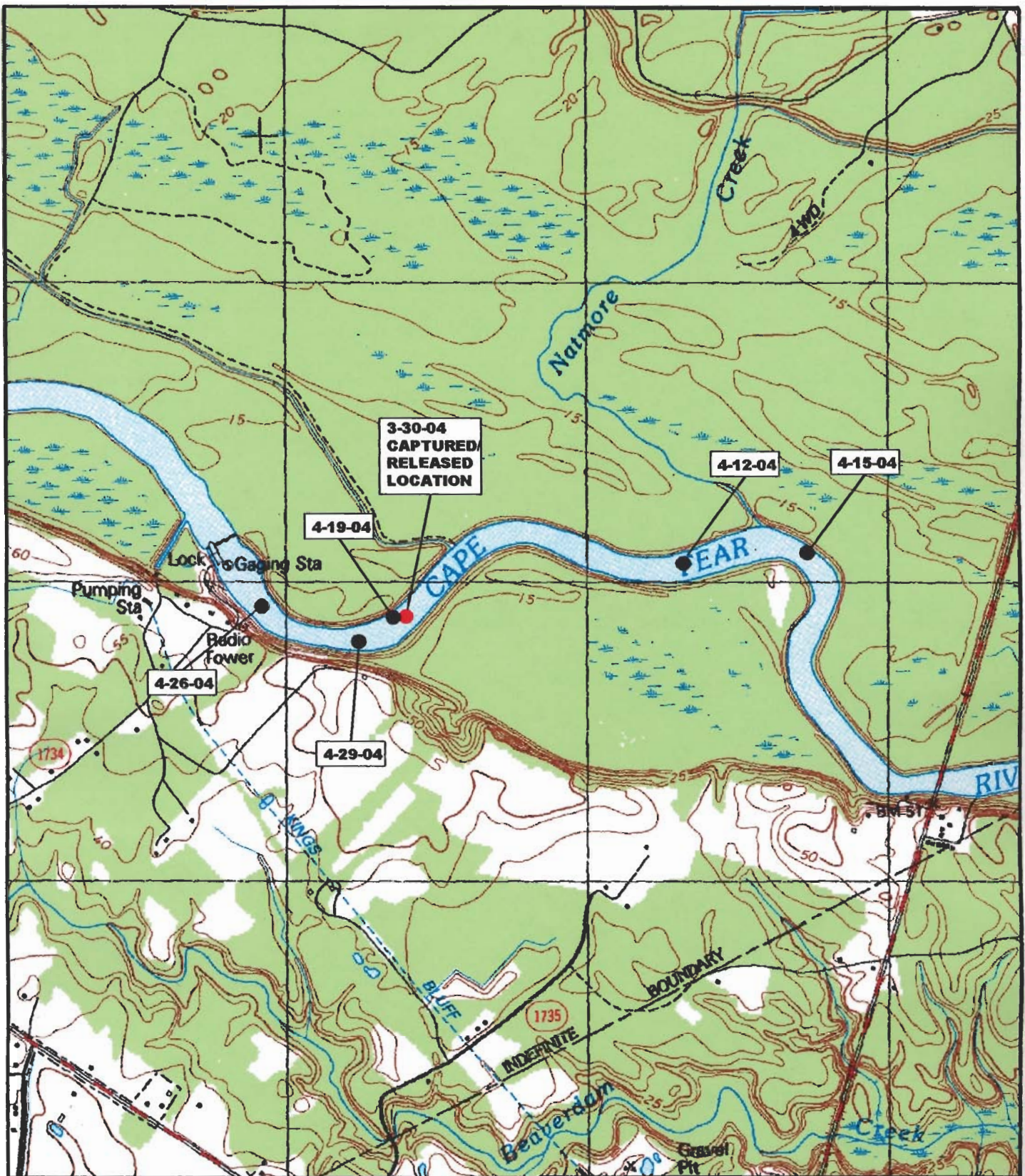


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5249

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5249-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9138

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5249**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5249-04

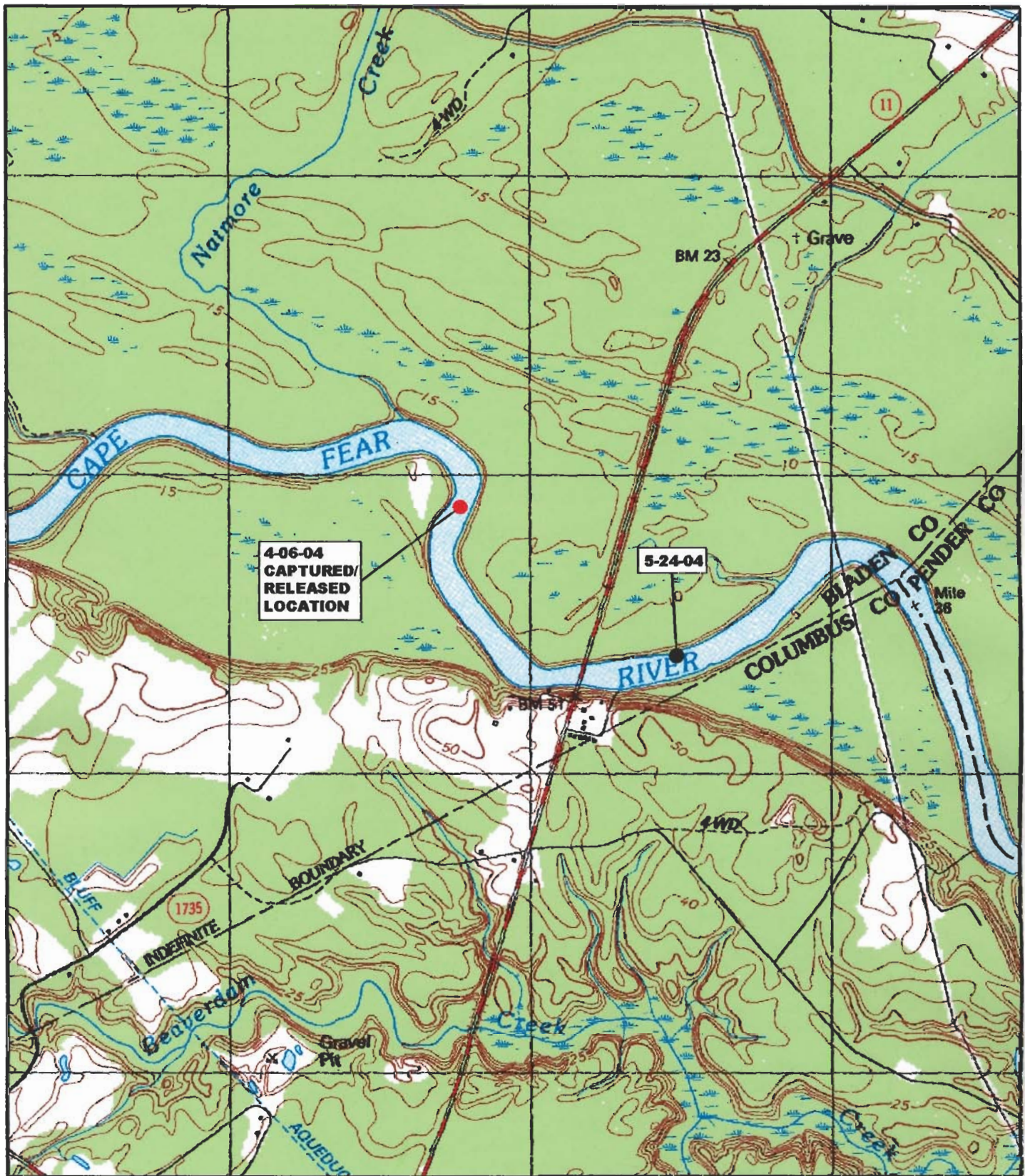


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9138

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-06-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5250

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5250-04

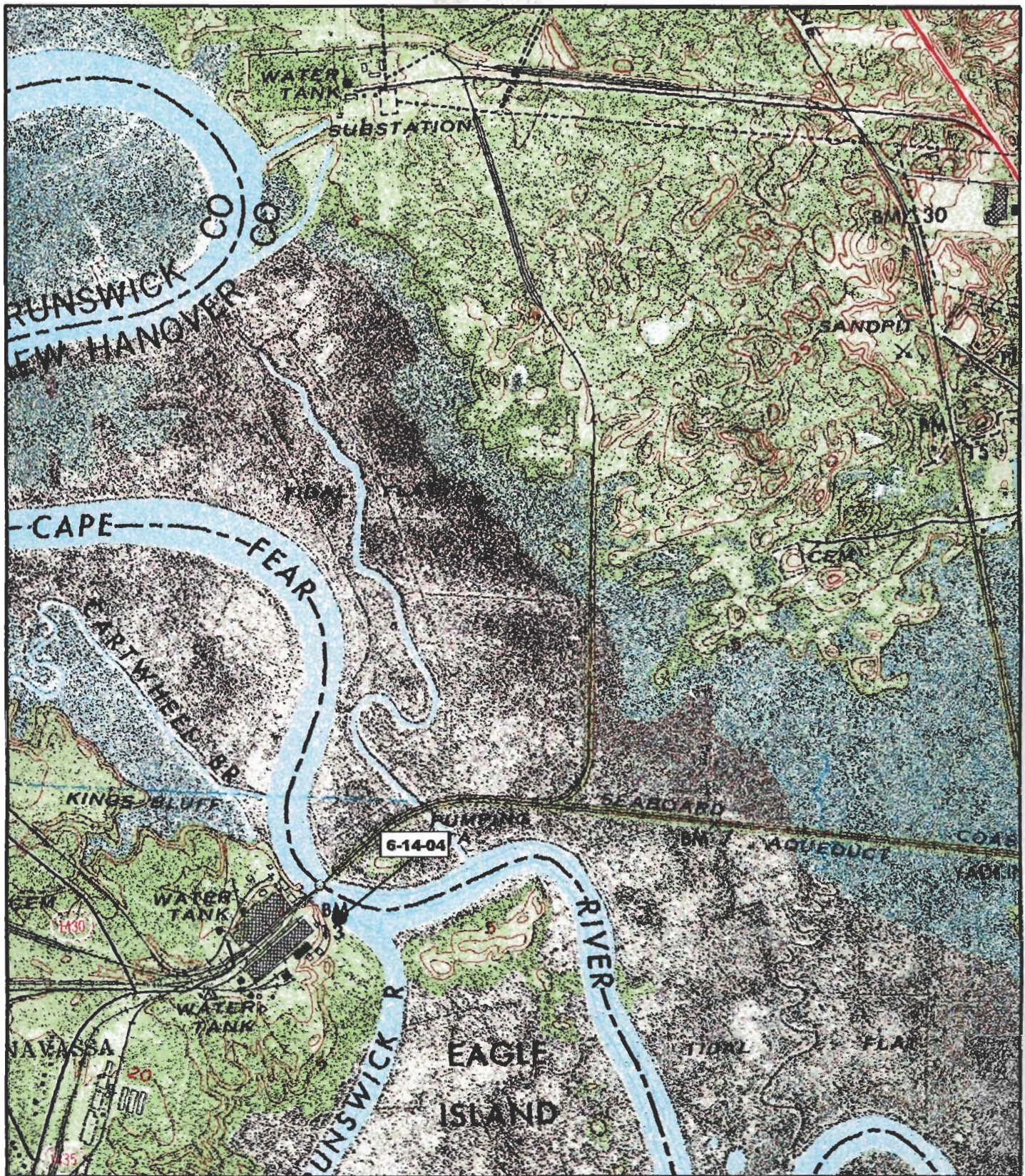


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-06-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5250

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5250-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-5139

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5251

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5251-04

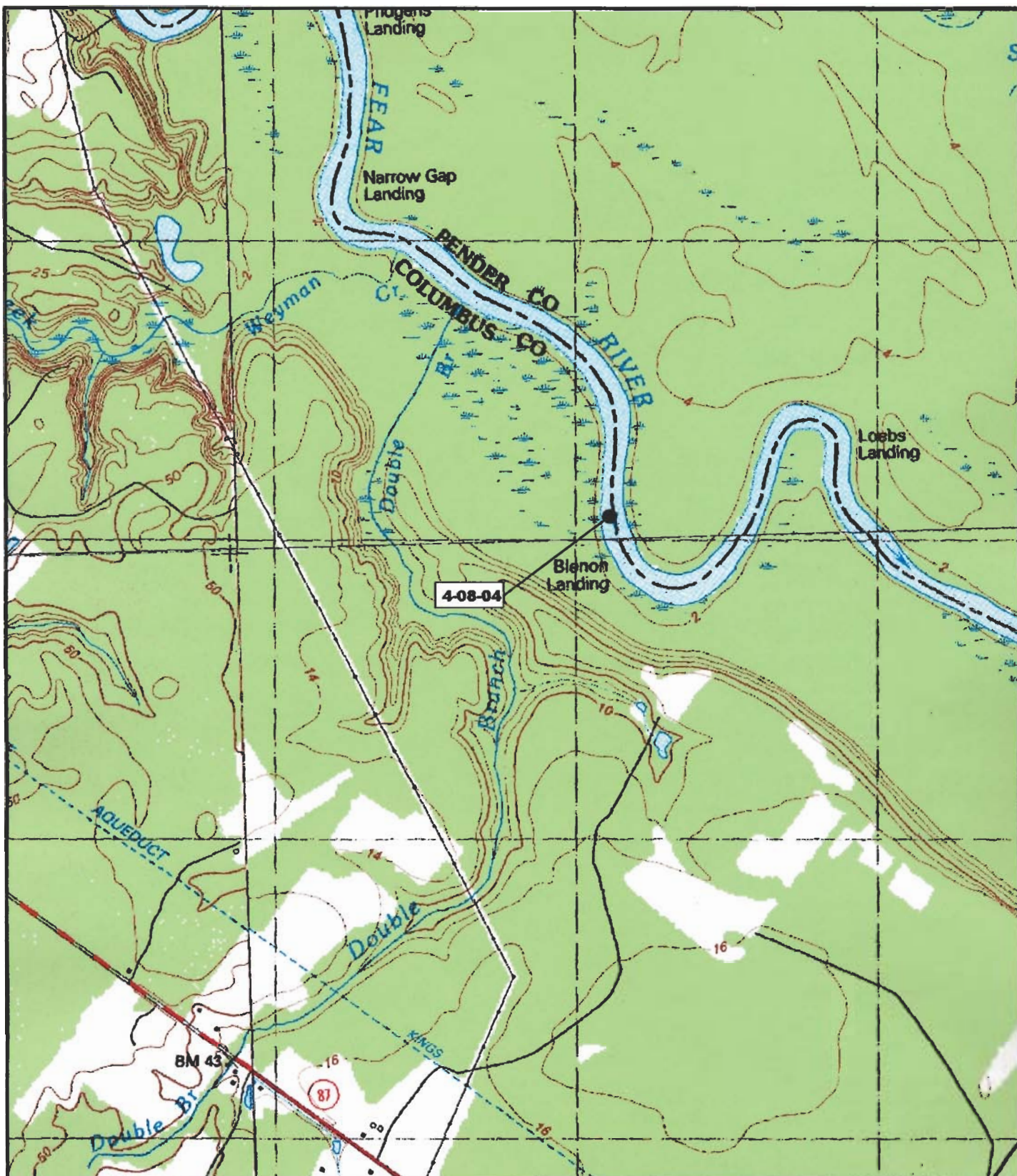


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 810/382-9253  
FAX 810/382-9138

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5251

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5251-04

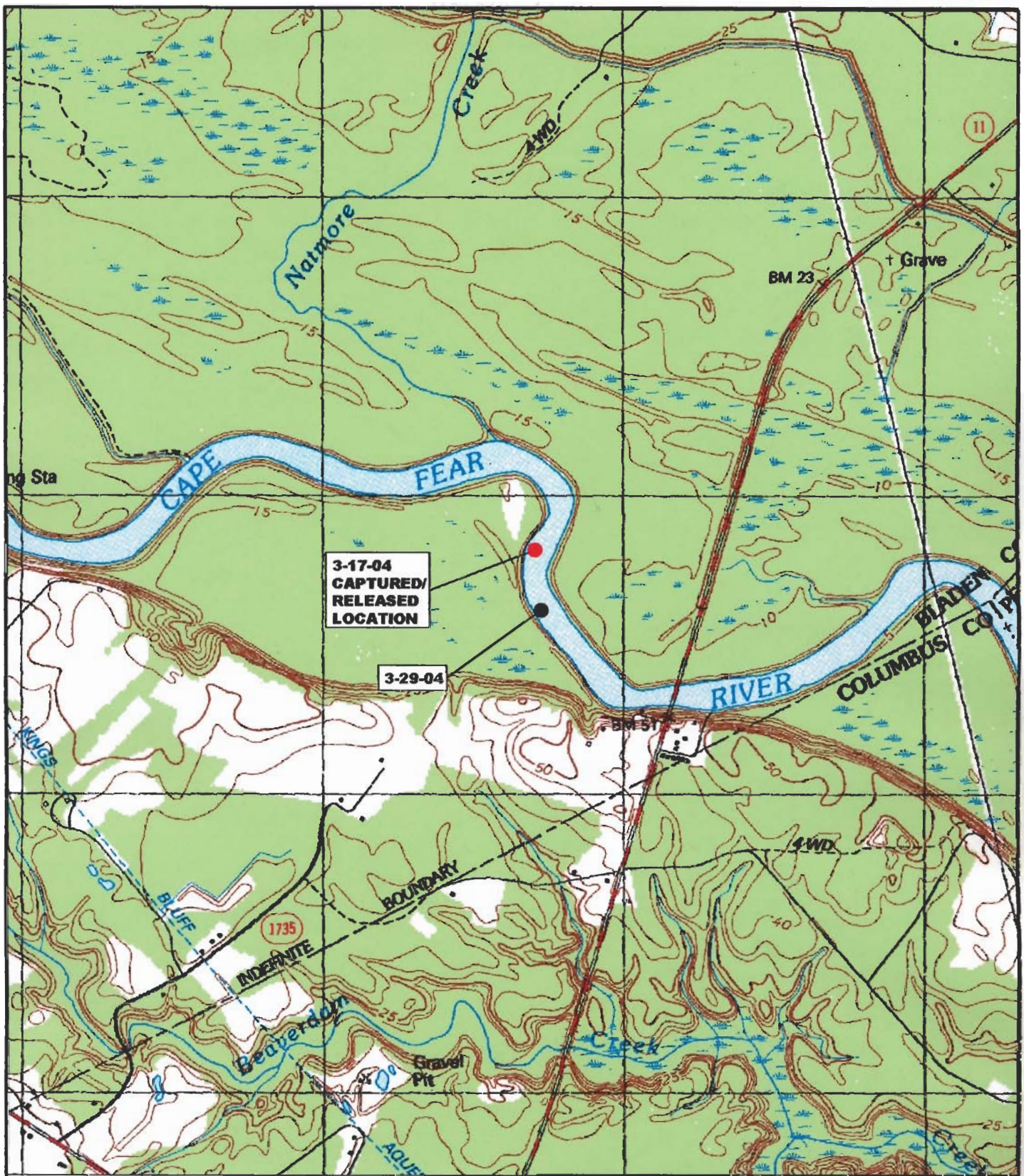


4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-17-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5252

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5252-04

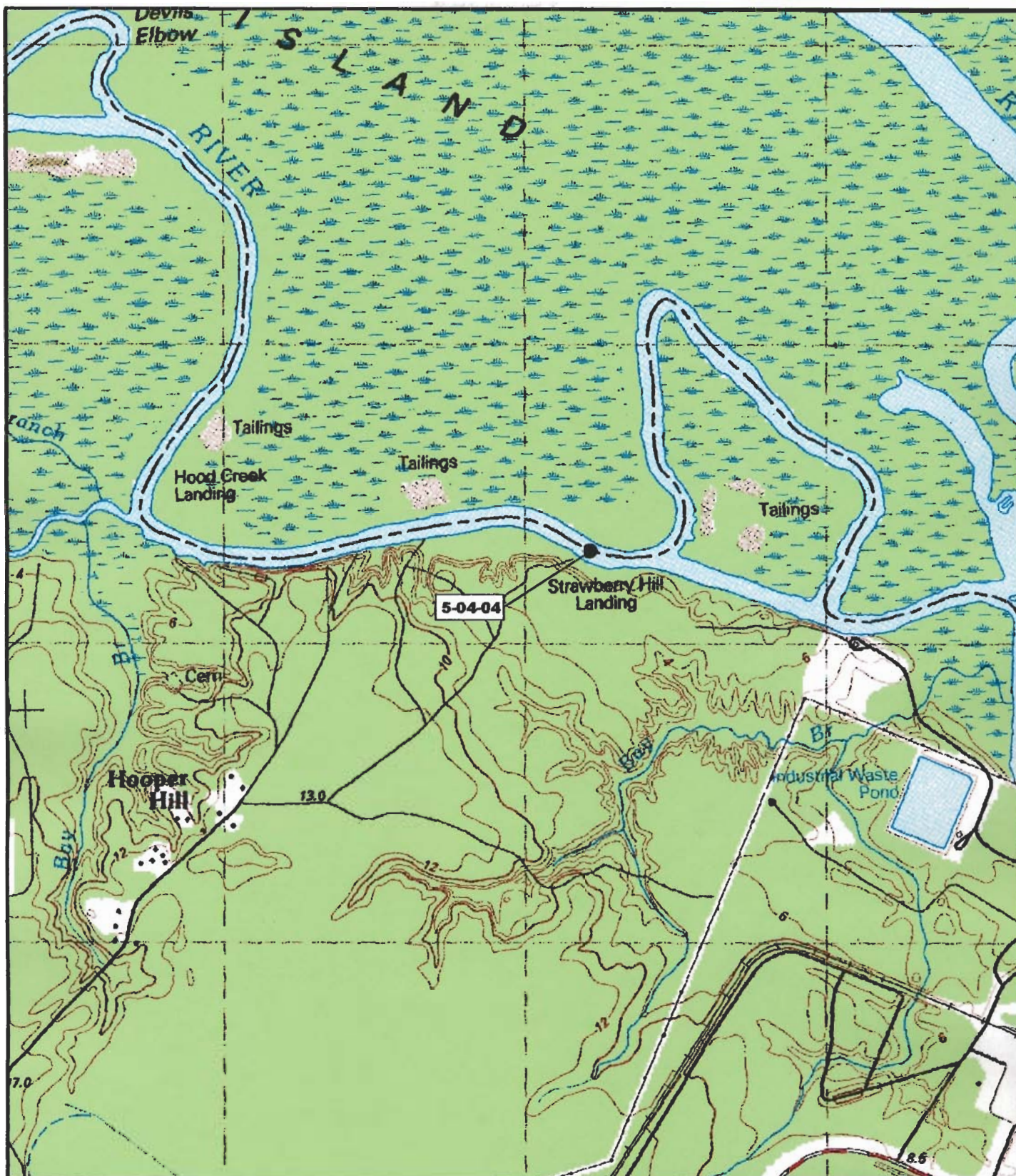


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-17-04
- SITE OF RELOCATED FISH

0 1500 3000

SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5252

## **MANUAL FISH TRACKING DATA WILMINGTON USACE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5252-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5253

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5253-04

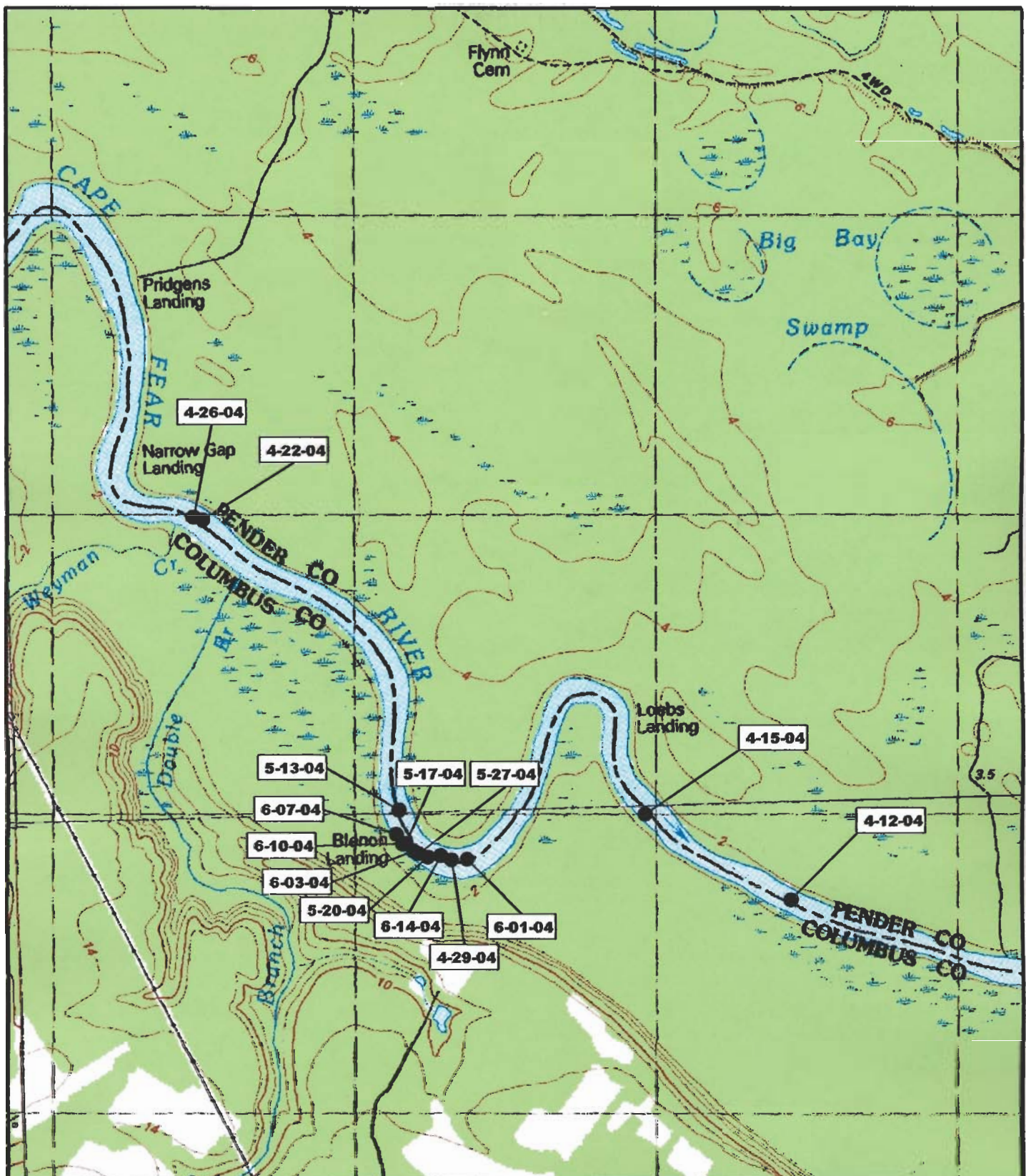


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9283  
FAX 910/392-9139

CP#1976.00

1 of 2





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5253

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY: *[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5253-04

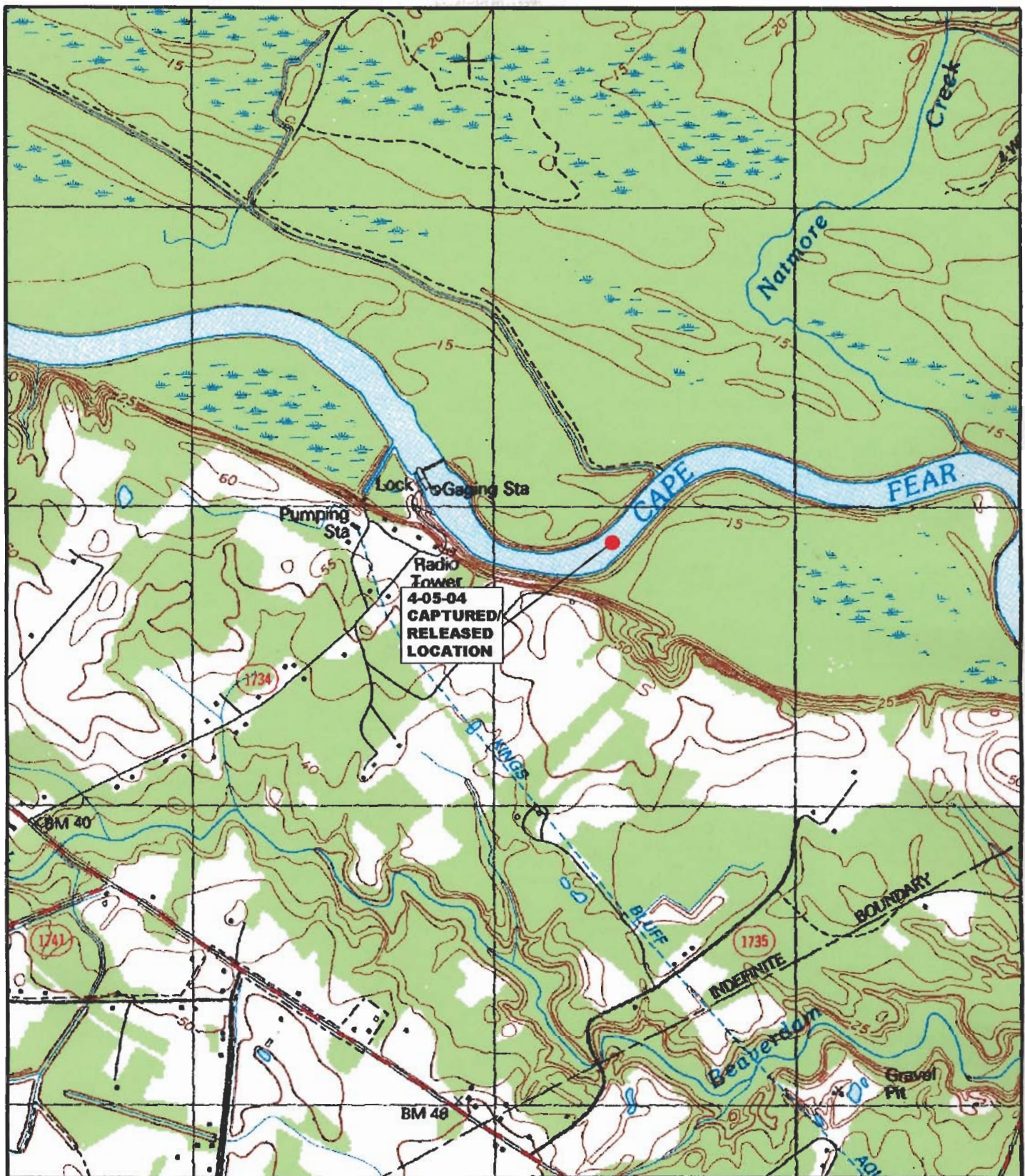


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-5139

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5254

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/11/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

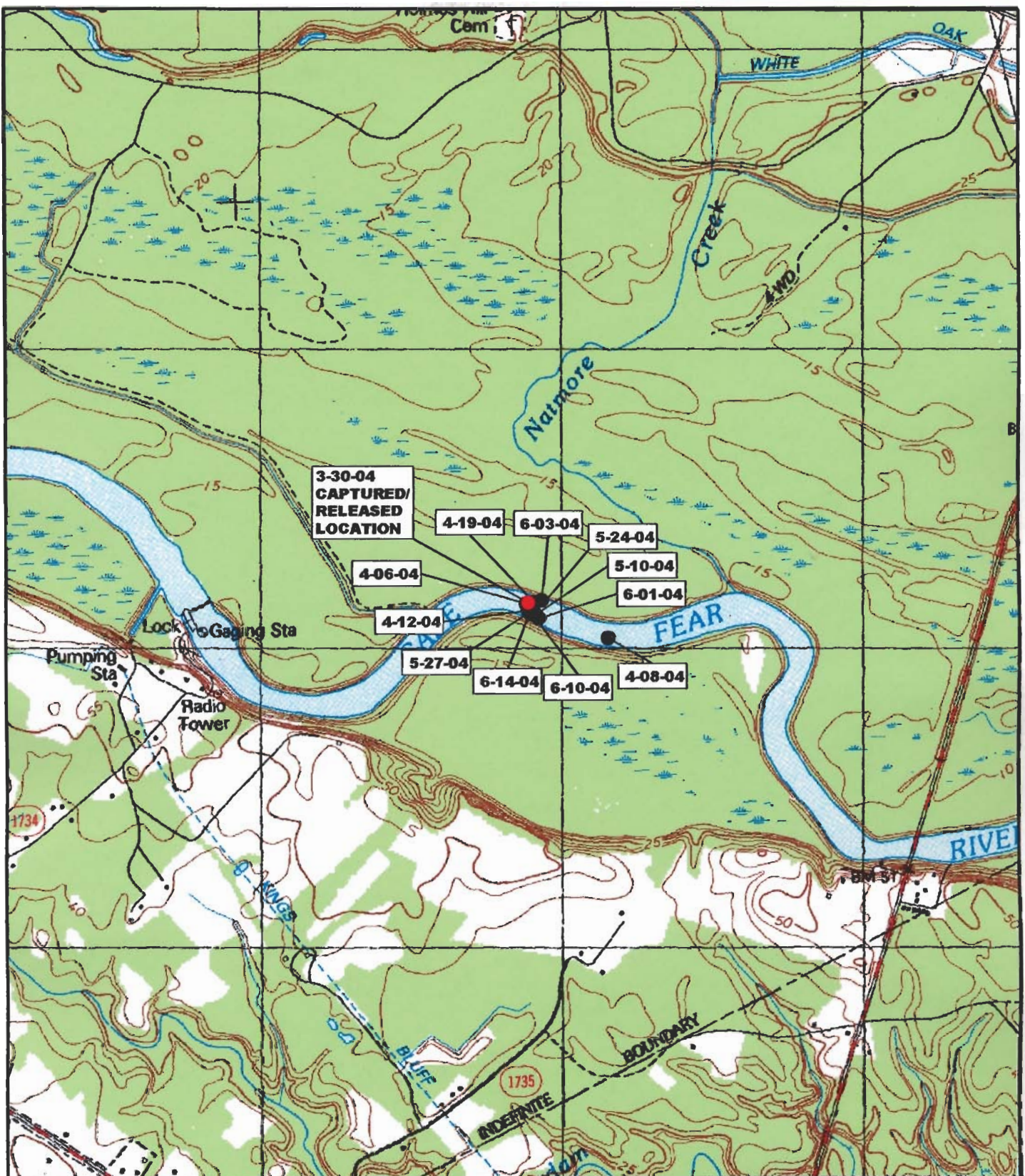
FILE: CZR5254-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5255**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/11/04

APPROVED BY:  
*[Signature]*

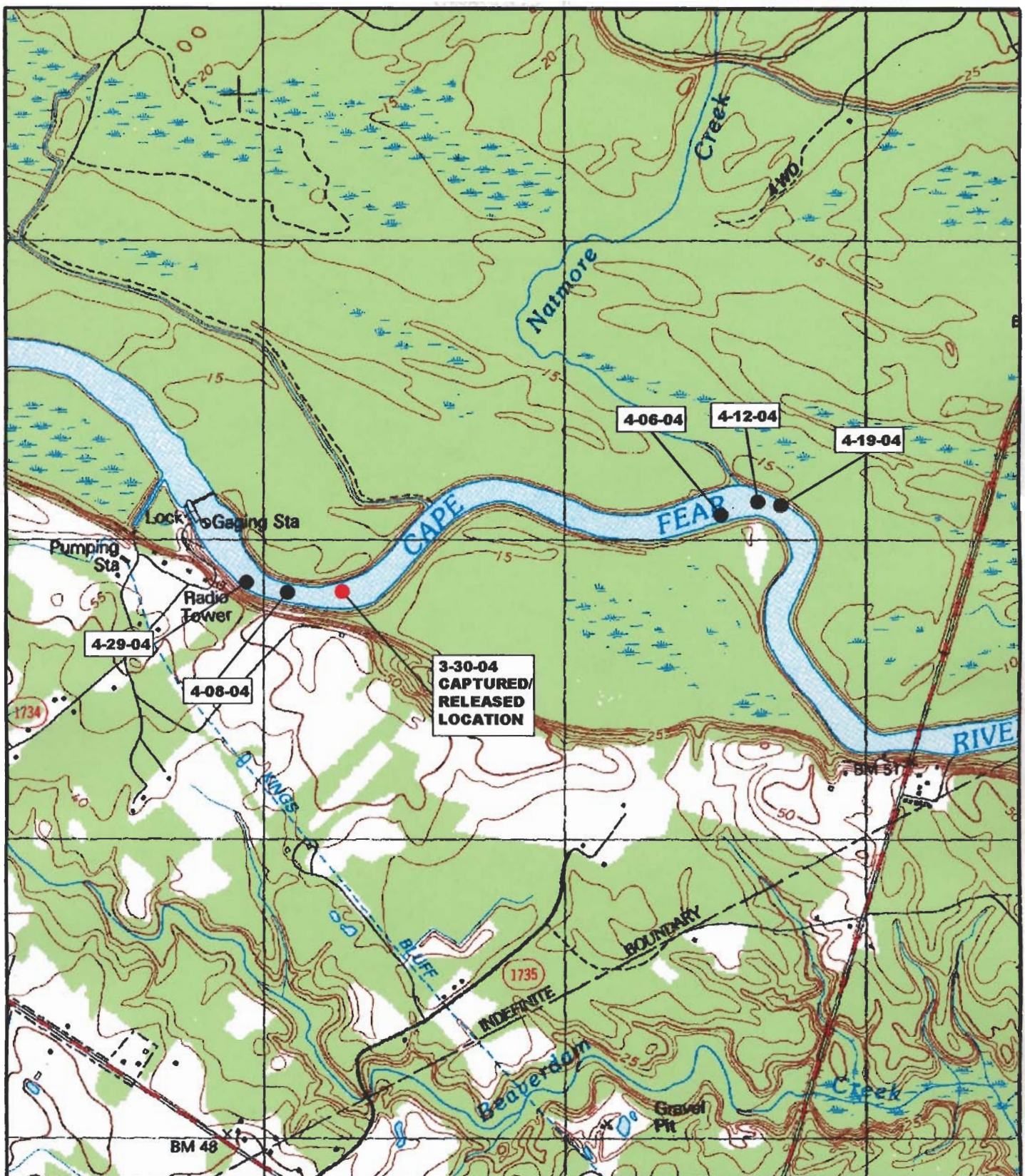
DRAWN BY: TLJ/TJB  
FILE: CZR5255-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5256

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

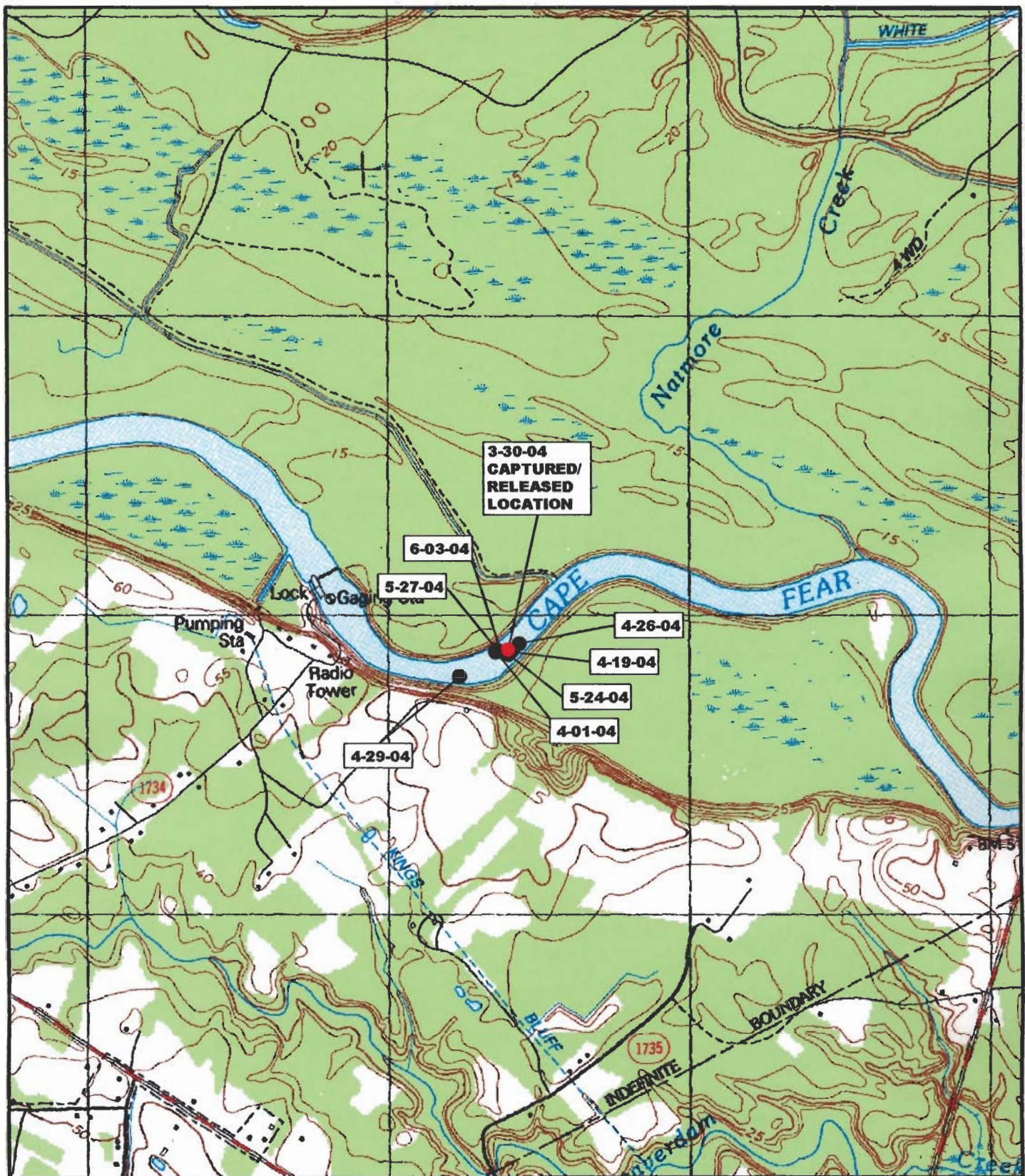
DRAWN BY: TLJ/TJB  
FILE: CZR5256-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9158

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5257

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

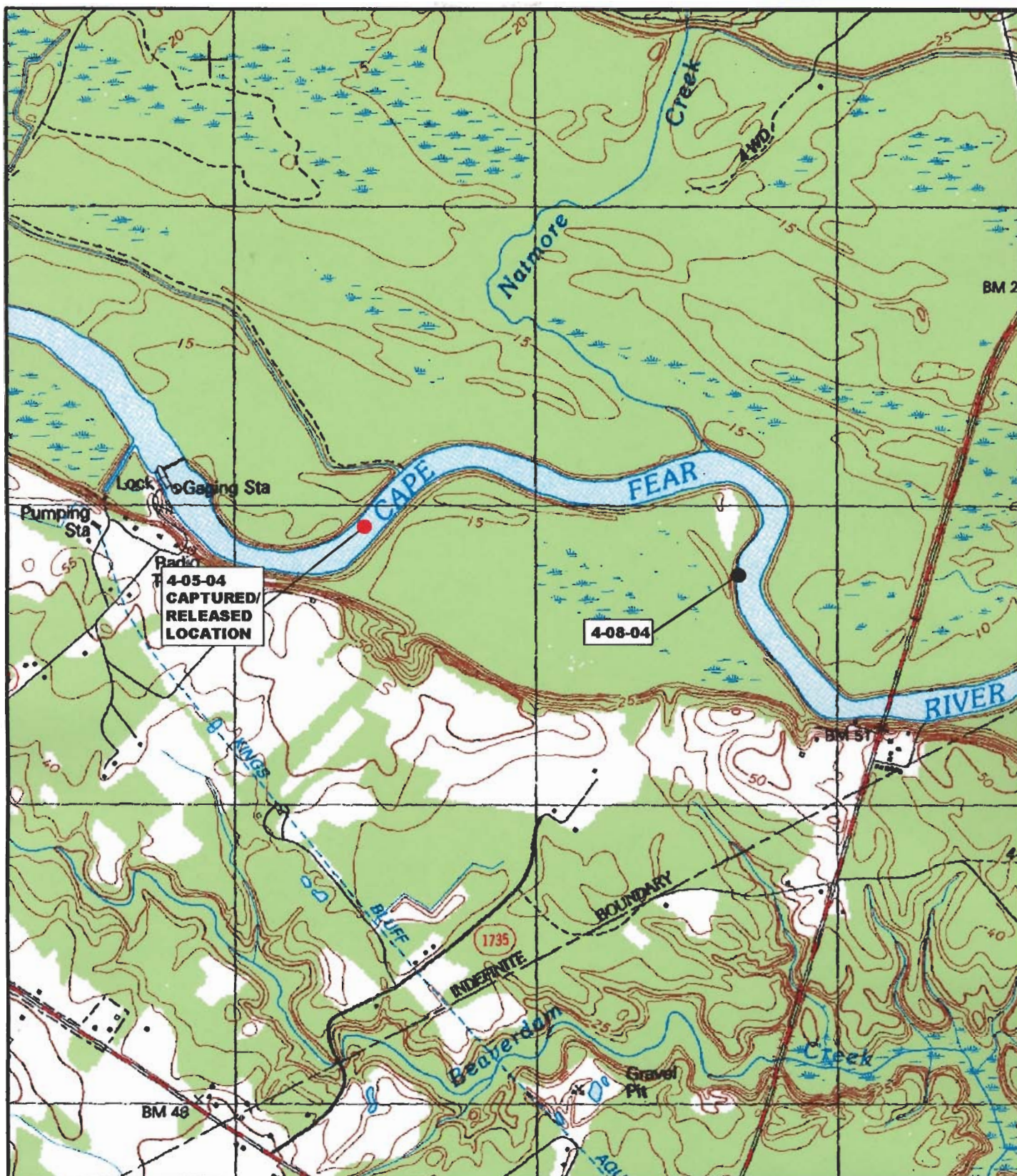
FILE: CZR5257-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5258

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

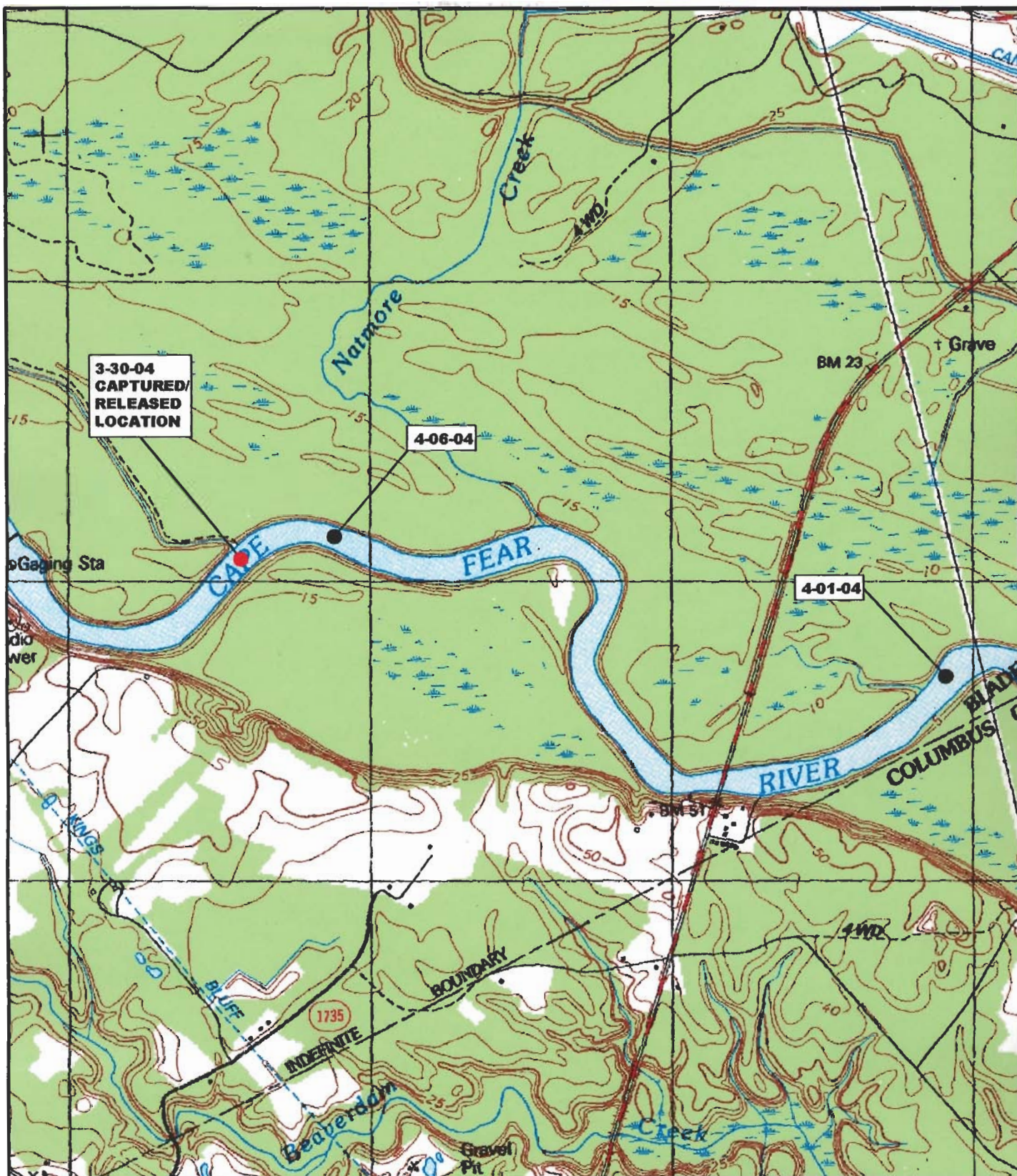
DRAWN BY: TLJ/TJB  
FILE: CZR5258-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9138

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5259**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:  
*[Signature]*

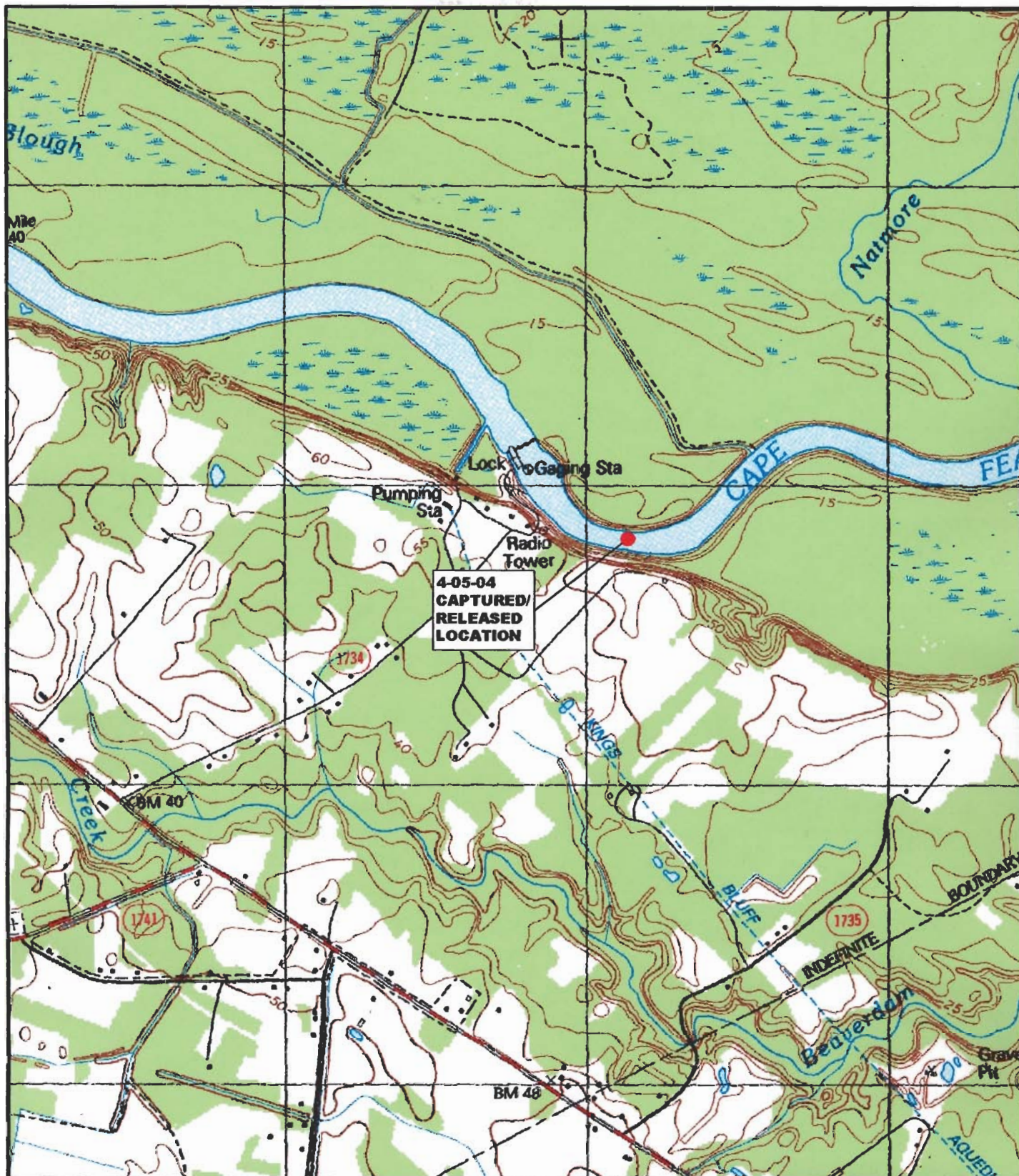
DRAWN BY: TLI/TJB  
FILE: CZR5259-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5260

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5260-04

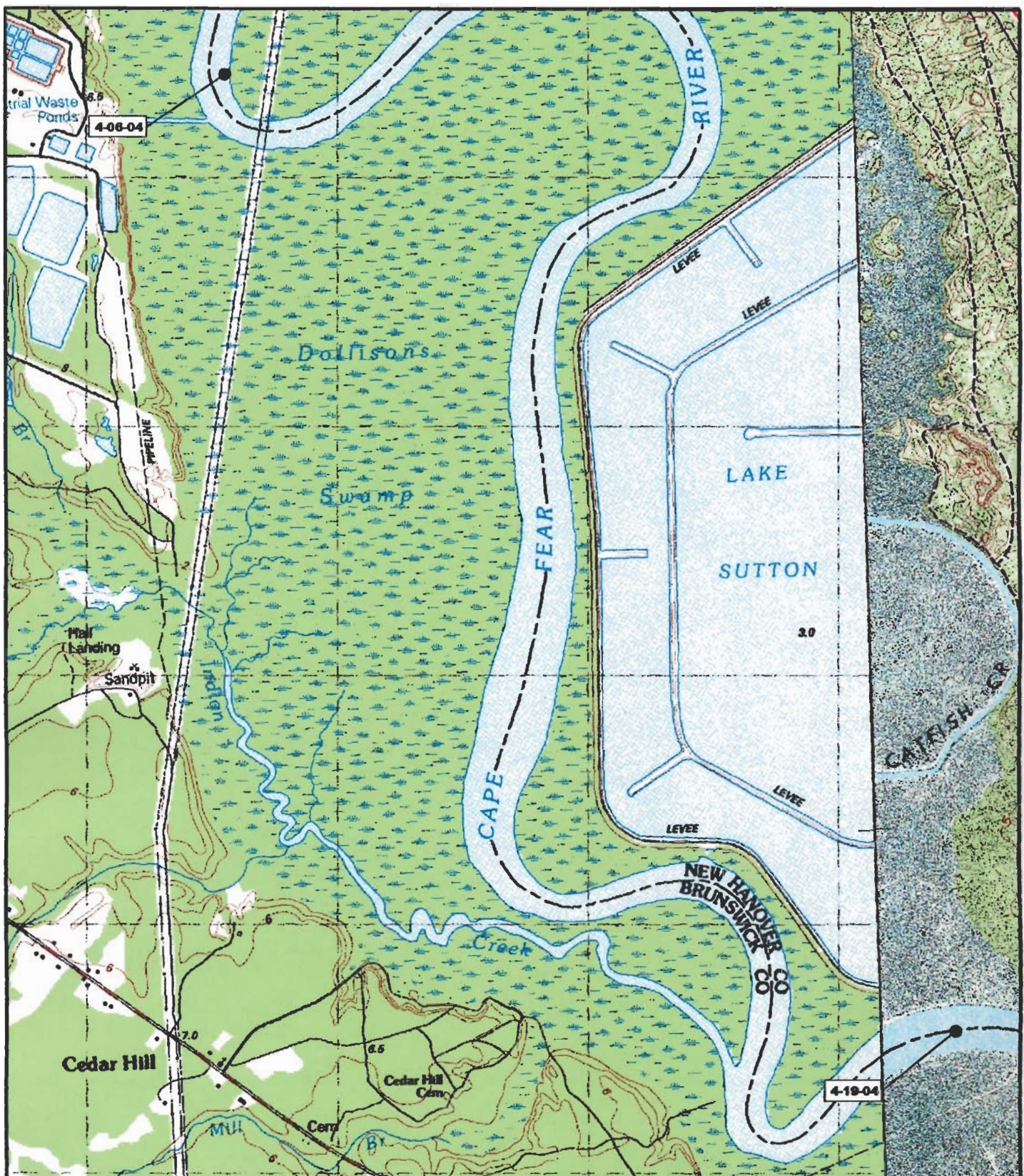


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9136

CP#1976.00

1 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1800 3600  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5260

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5260-04

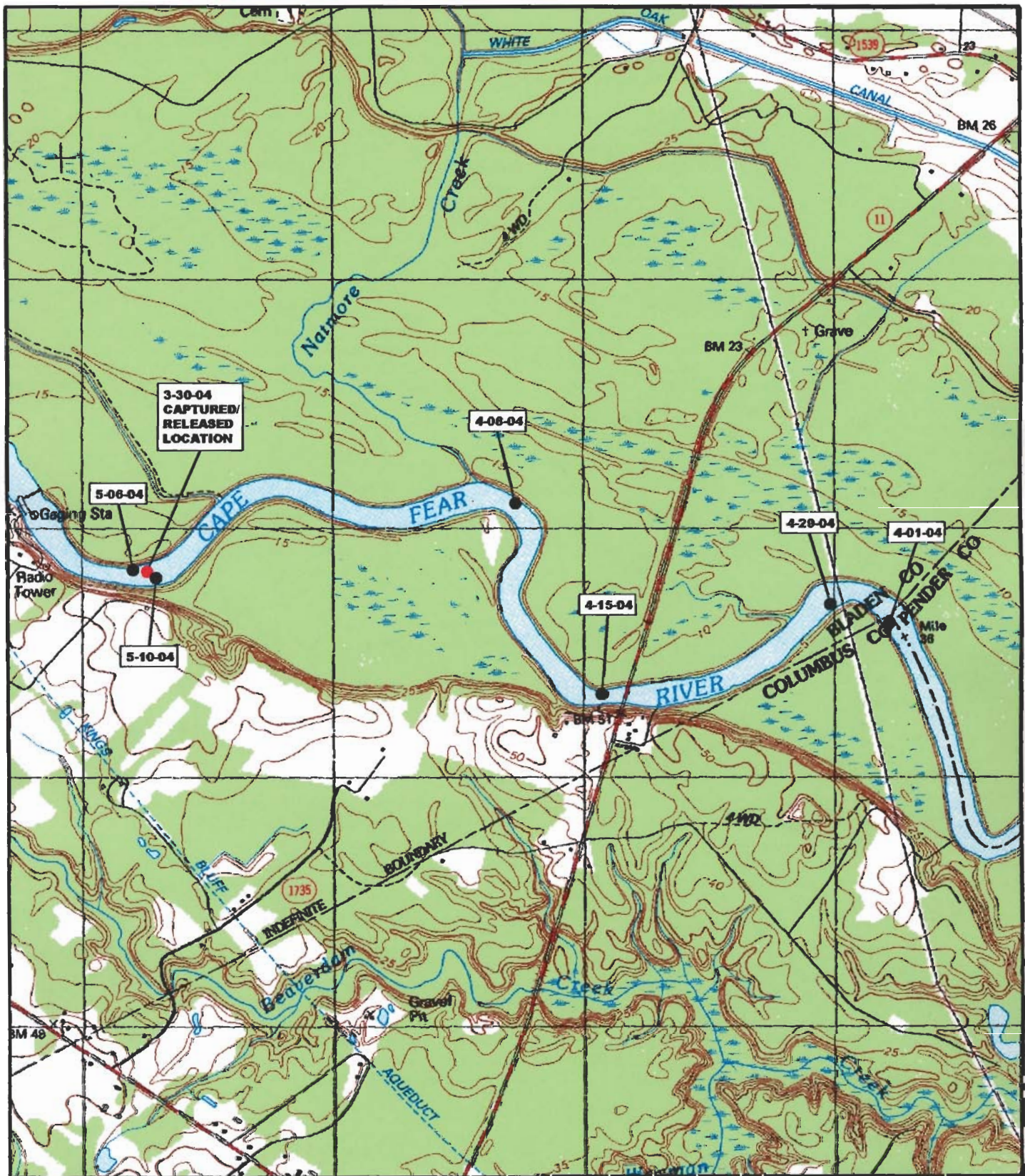


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9138

CP#1976.00

2 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1800 3600  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5261**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:

*[Signature]*

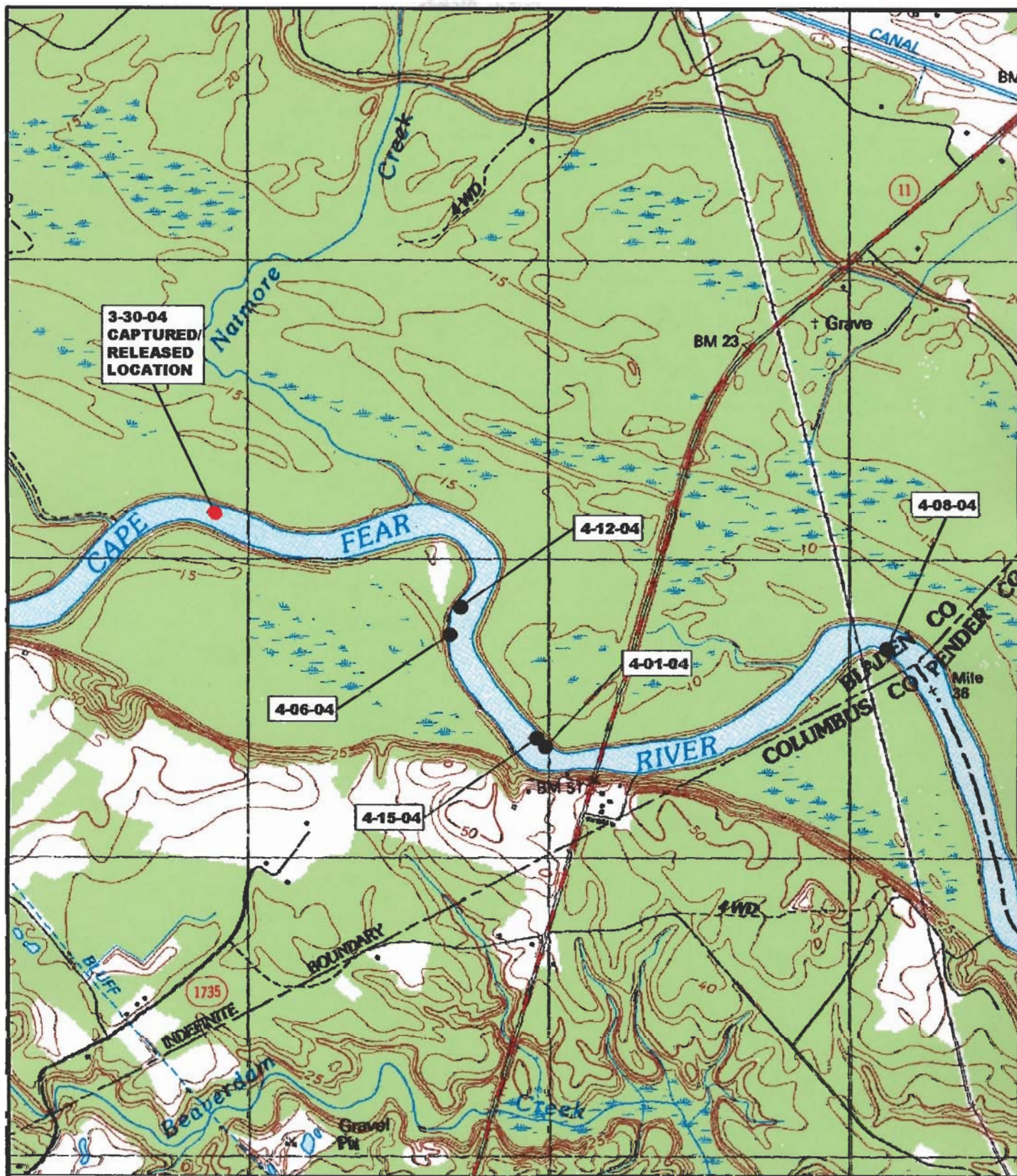
DRAWN BY: TLJ/TJB  
FILE: CZR5261-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8138

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5262**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5262-04

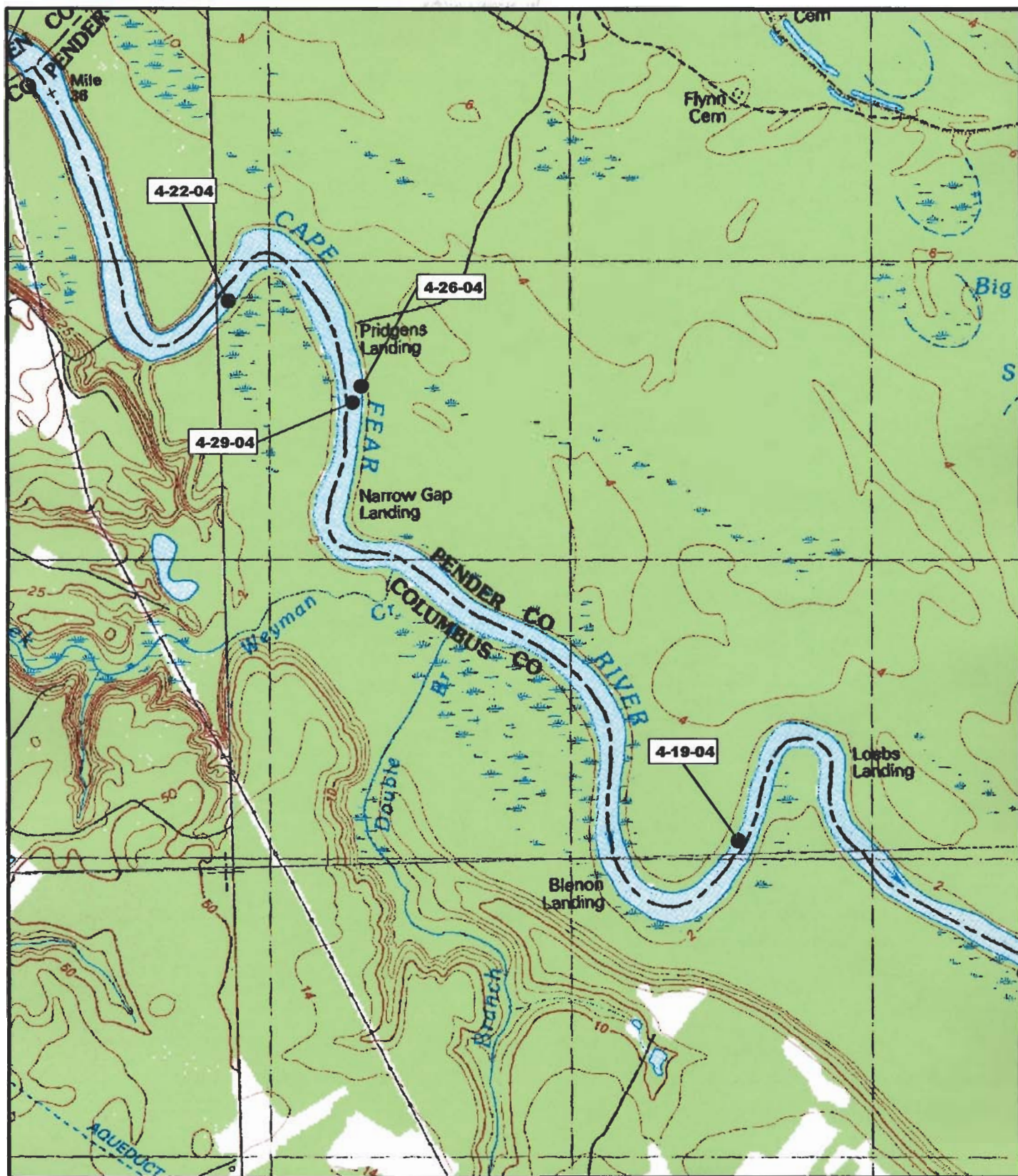


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5262**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/12/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5262-04

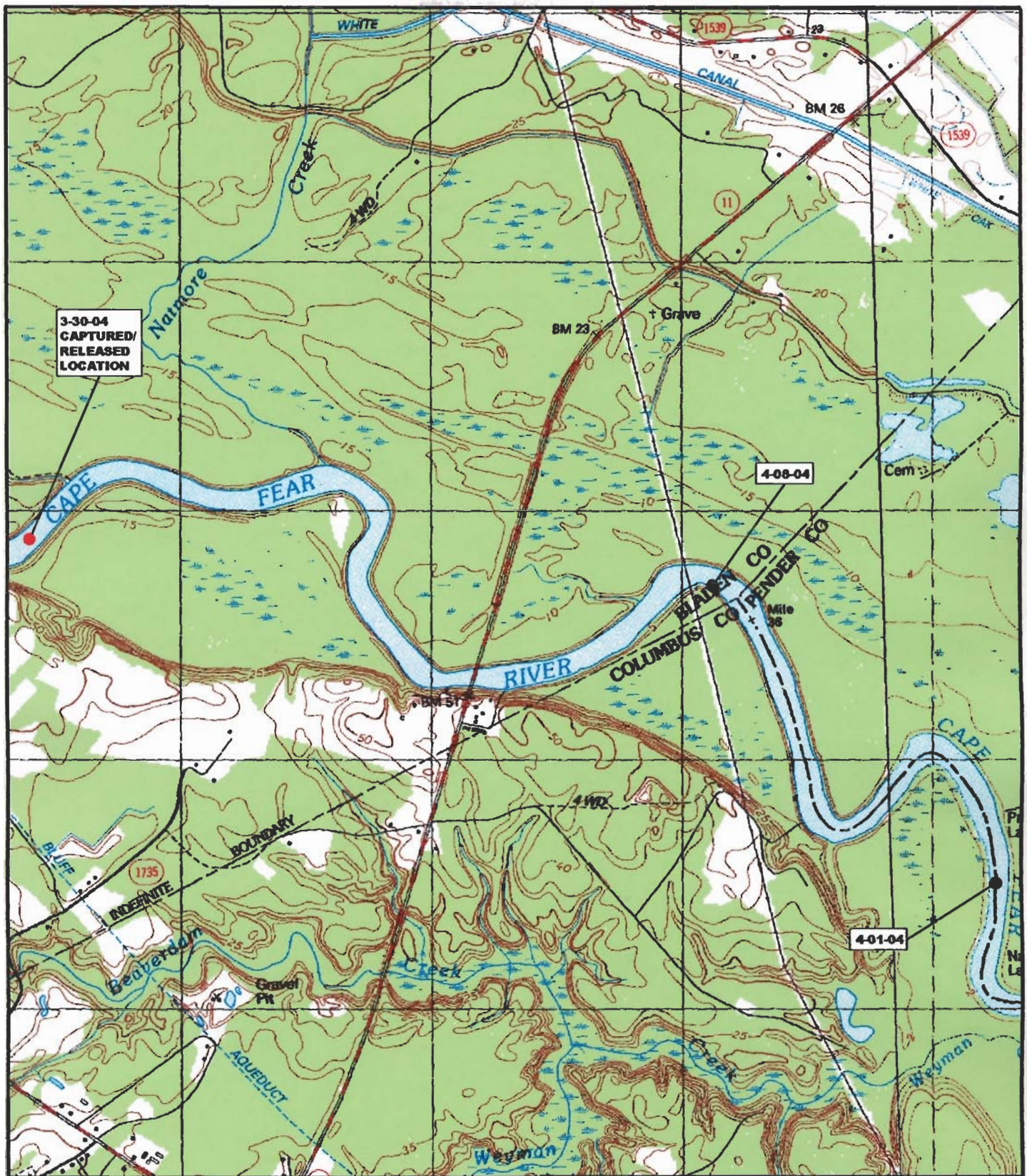


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1800 3600  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5263

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:  
*[Signature]*

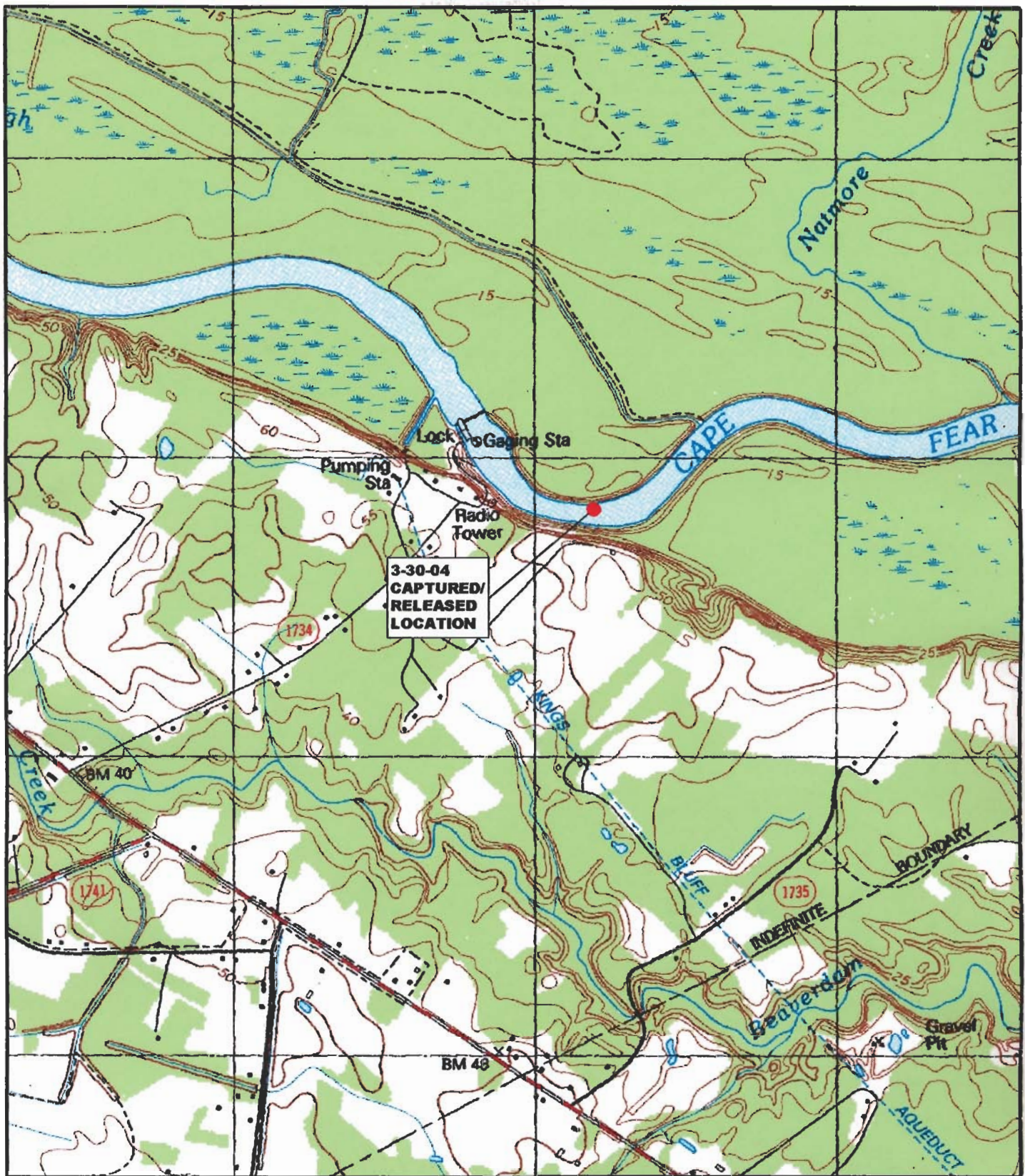
DRAWN BY: TLJ/TJB  
FILE: CZR5263-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-6253  
FAX 910/392-9138

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5264

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/12/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

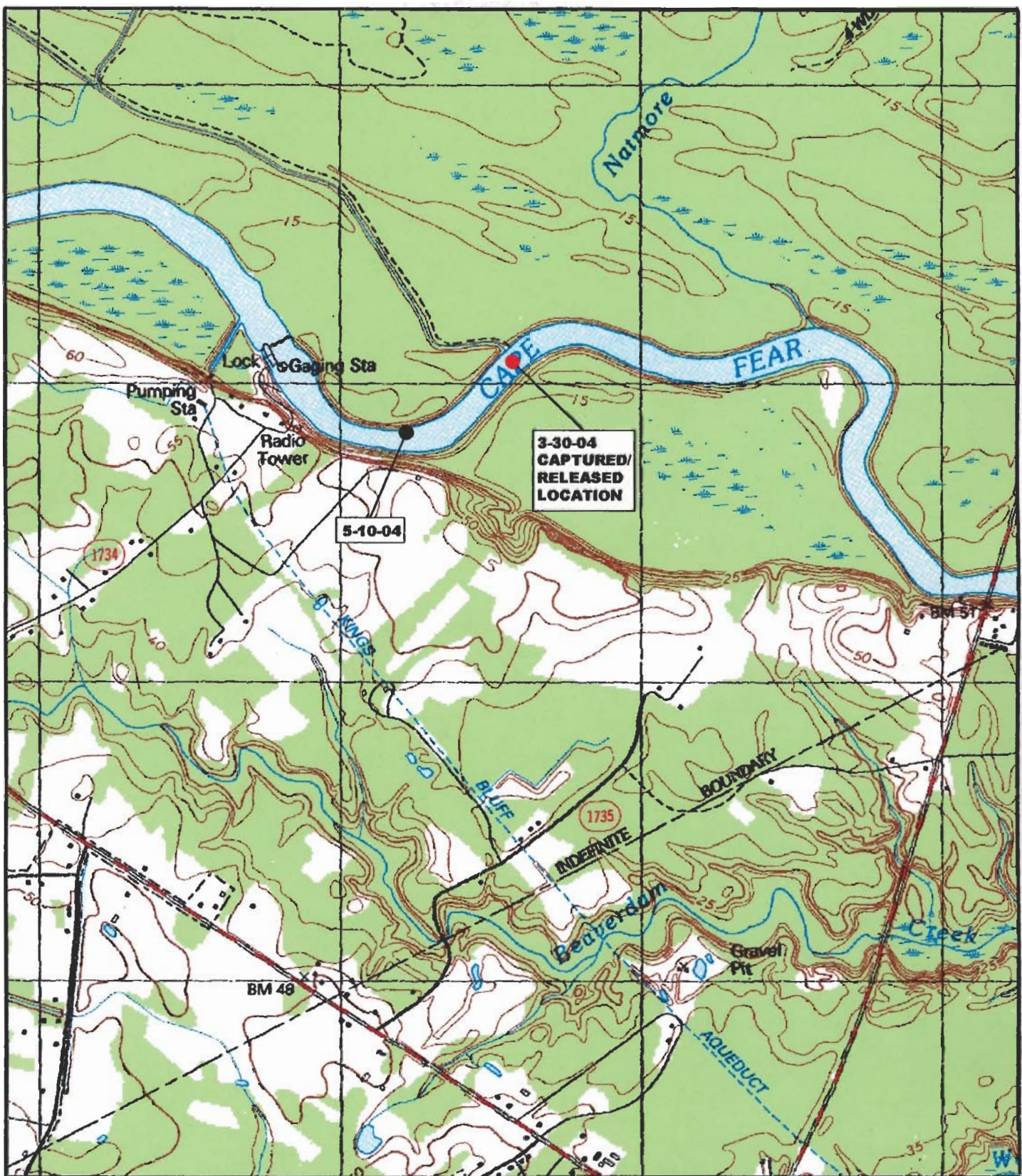
FILE: CZR5264-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5265

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:

*Wm*

DRAWN BY: TLJ/TJB  
FILE: CZR5265-04

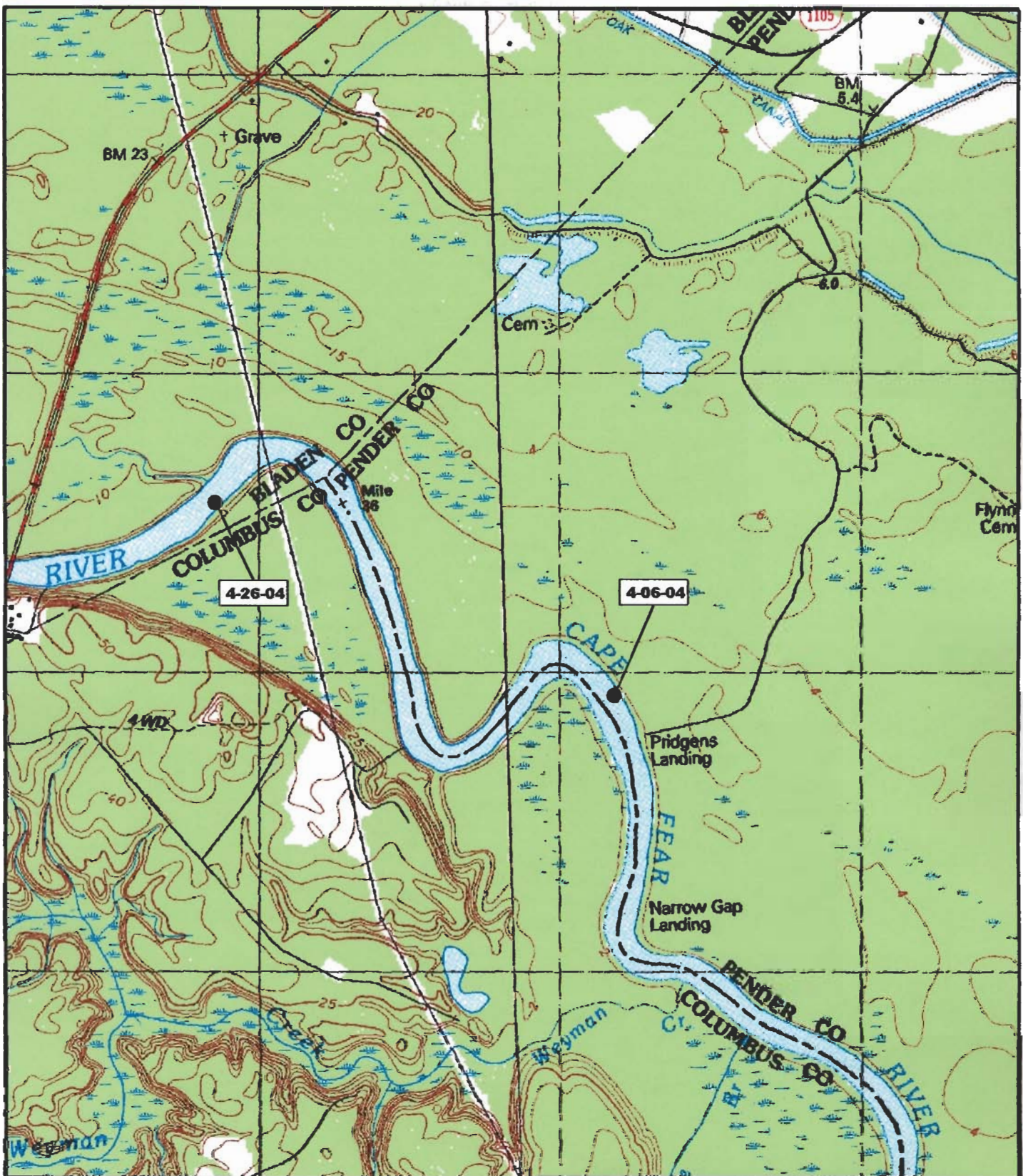


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5265

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/12/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5265-04

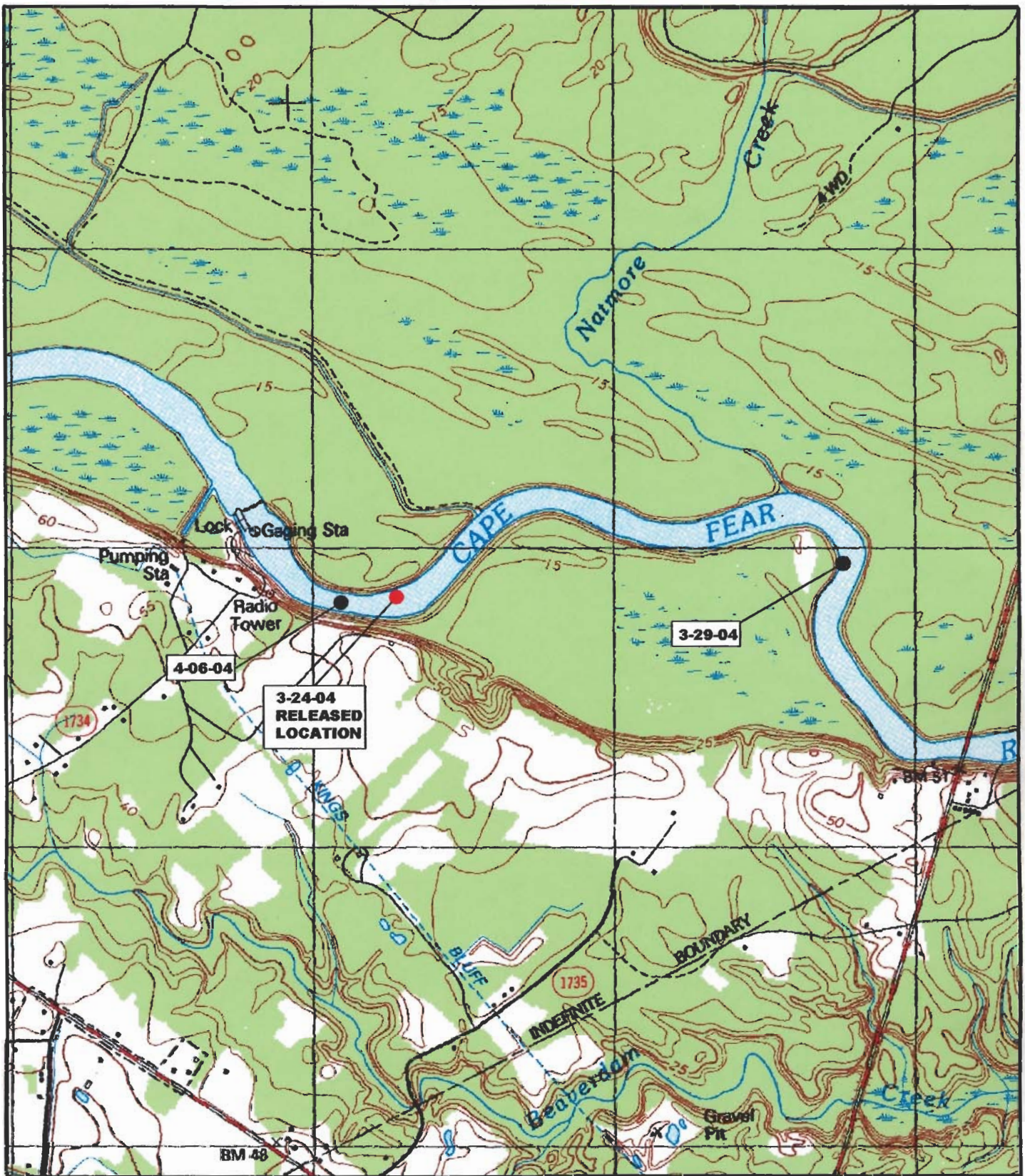


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-24-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5266

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/12/04

APPROVED BY:  
*[Signature]*

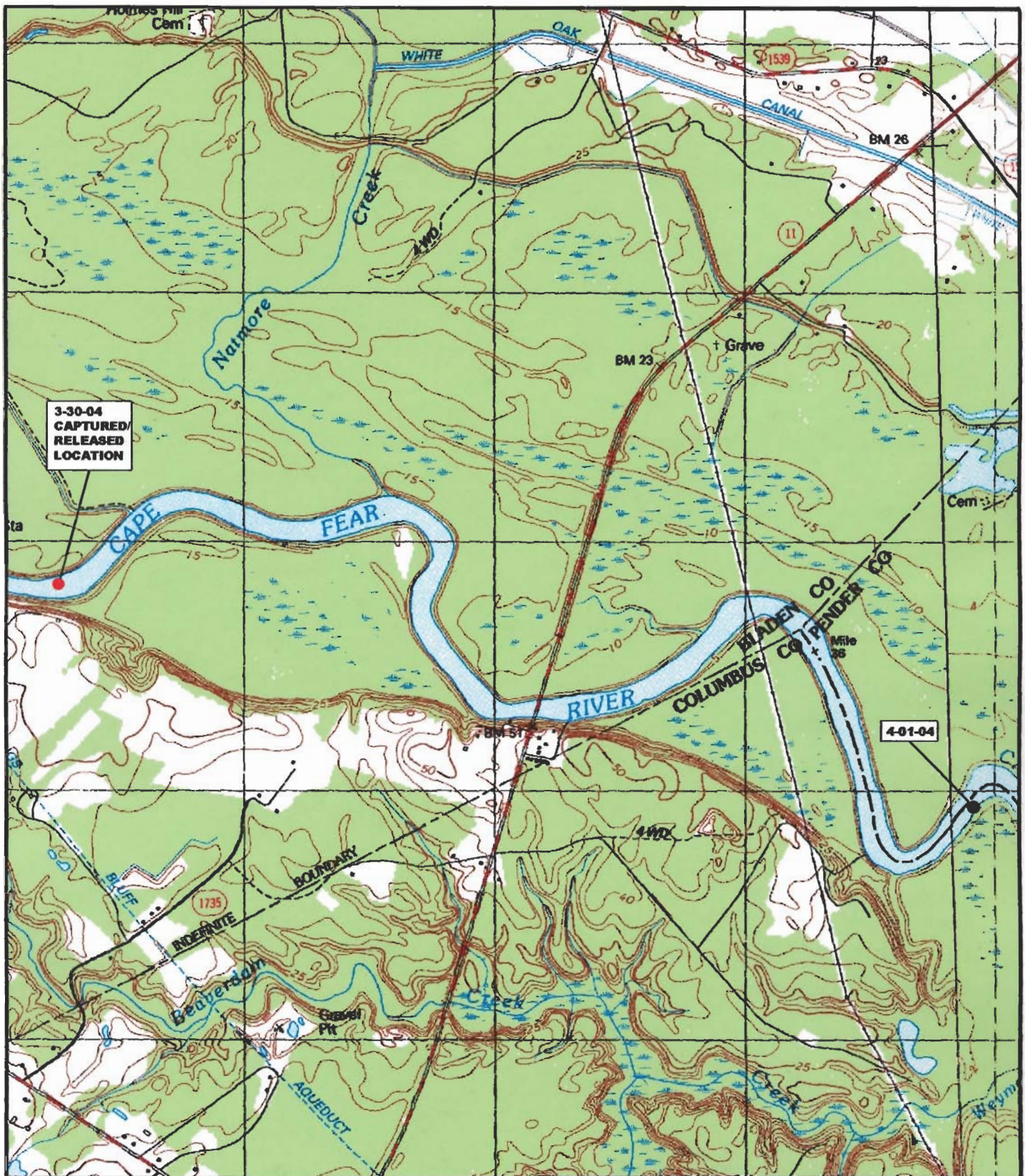
DRAWN BY: TLJ/TJB  
FILE: CZR5266-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8233  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1800 3600  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5267

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

*[Signature]*

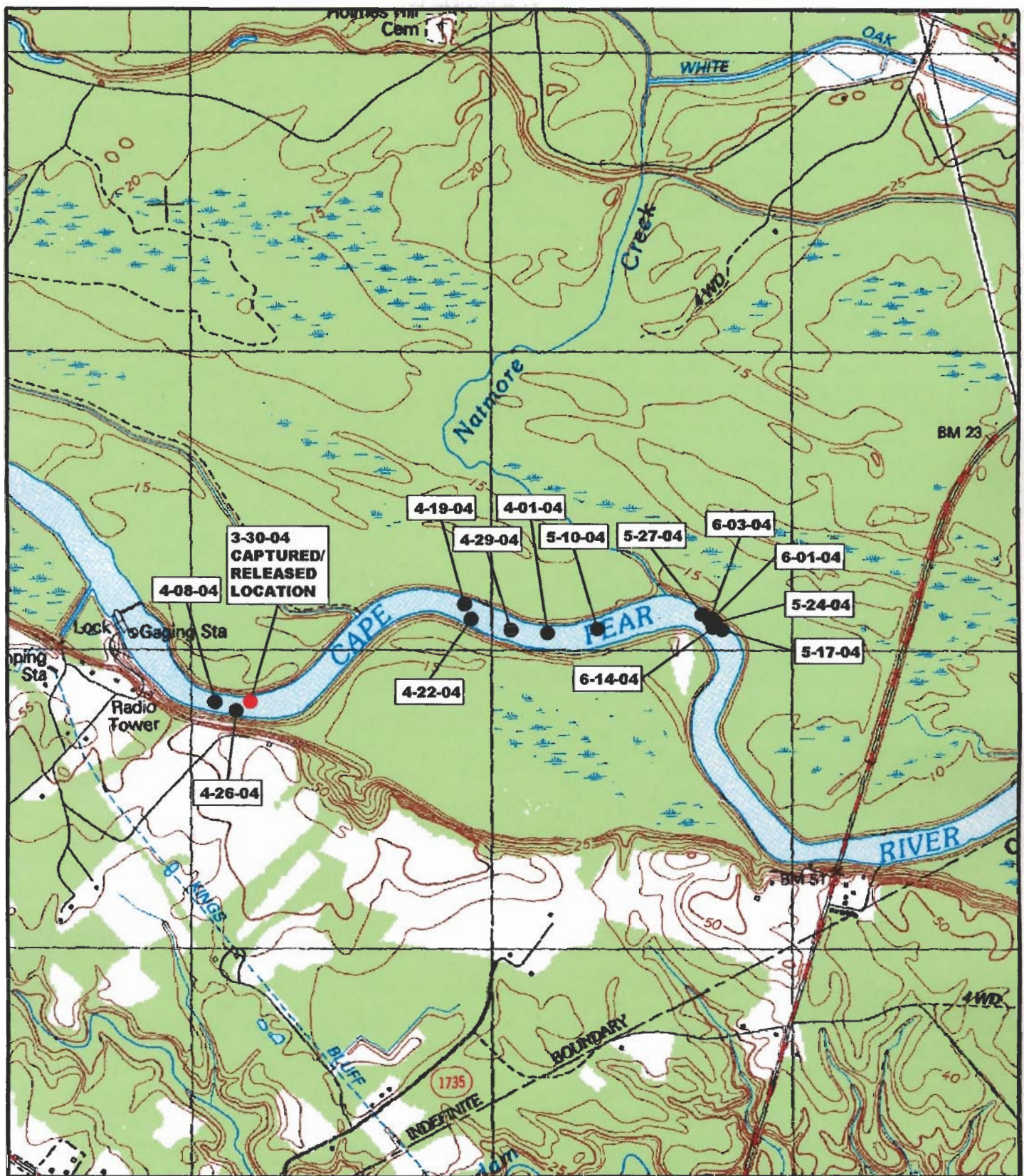
DRAWN BY: TLJ/TJB  
FILE: CZR5267-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5268

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

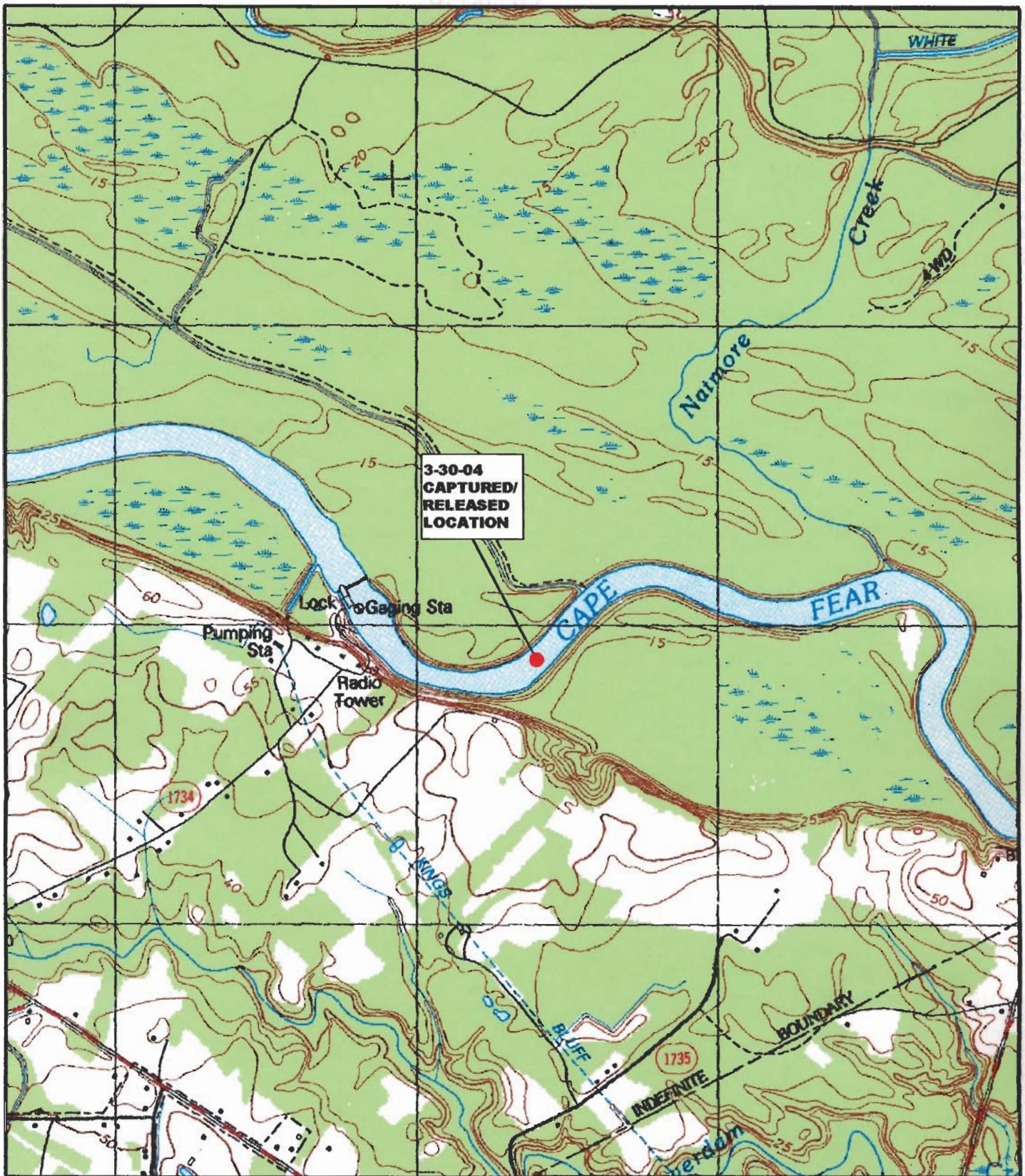
FILE: CZR5268-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9233  
FAX 910/392-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5269

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/13/04

APPROVED BY:

DRAWN BY: TLJ/TJB

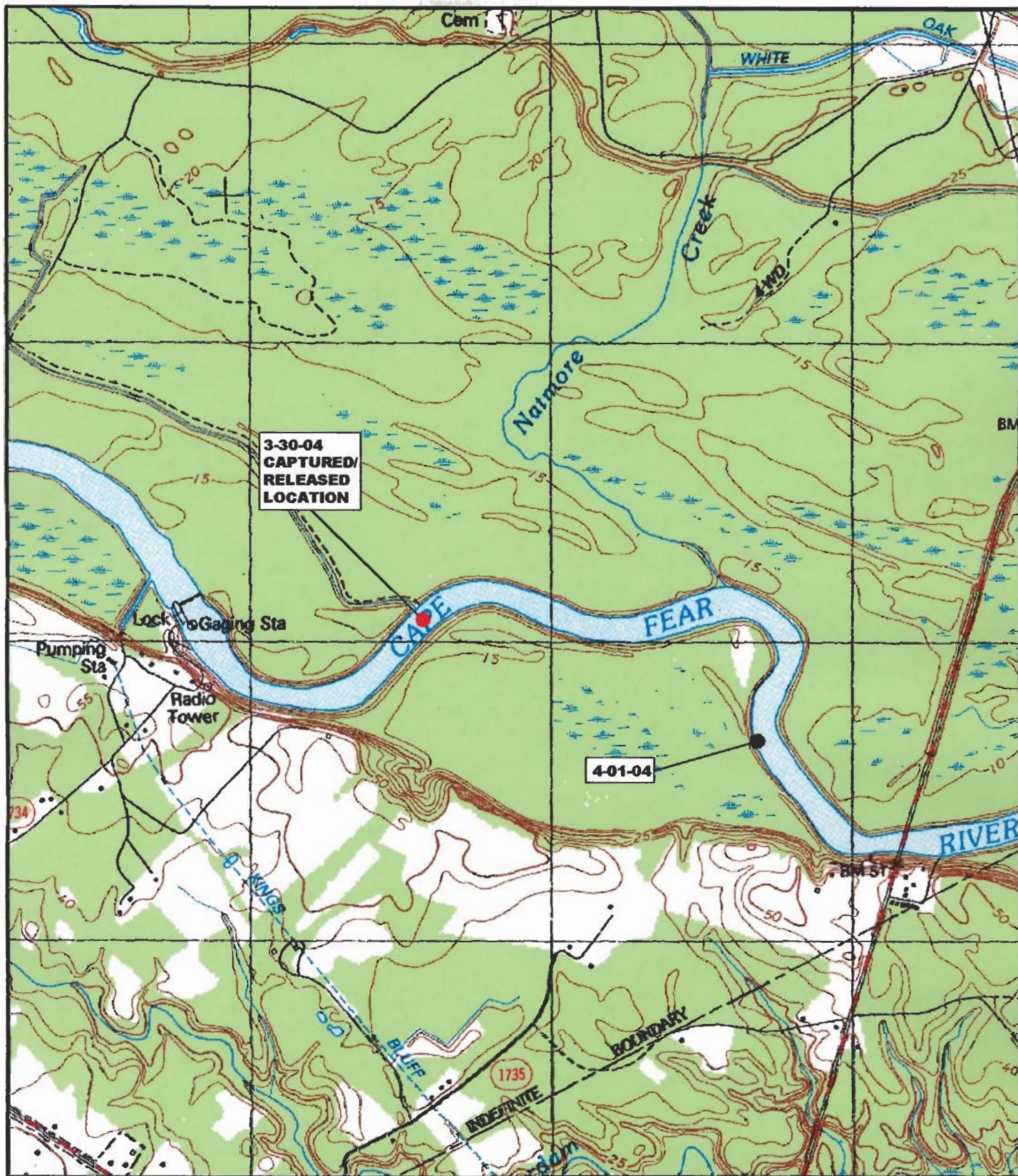
FILE: CZR5269-04



4709 COLLEGE ACRES DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





SITE OF RELOCATED AMERICAN SHAD  
CZR5270

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5270-04

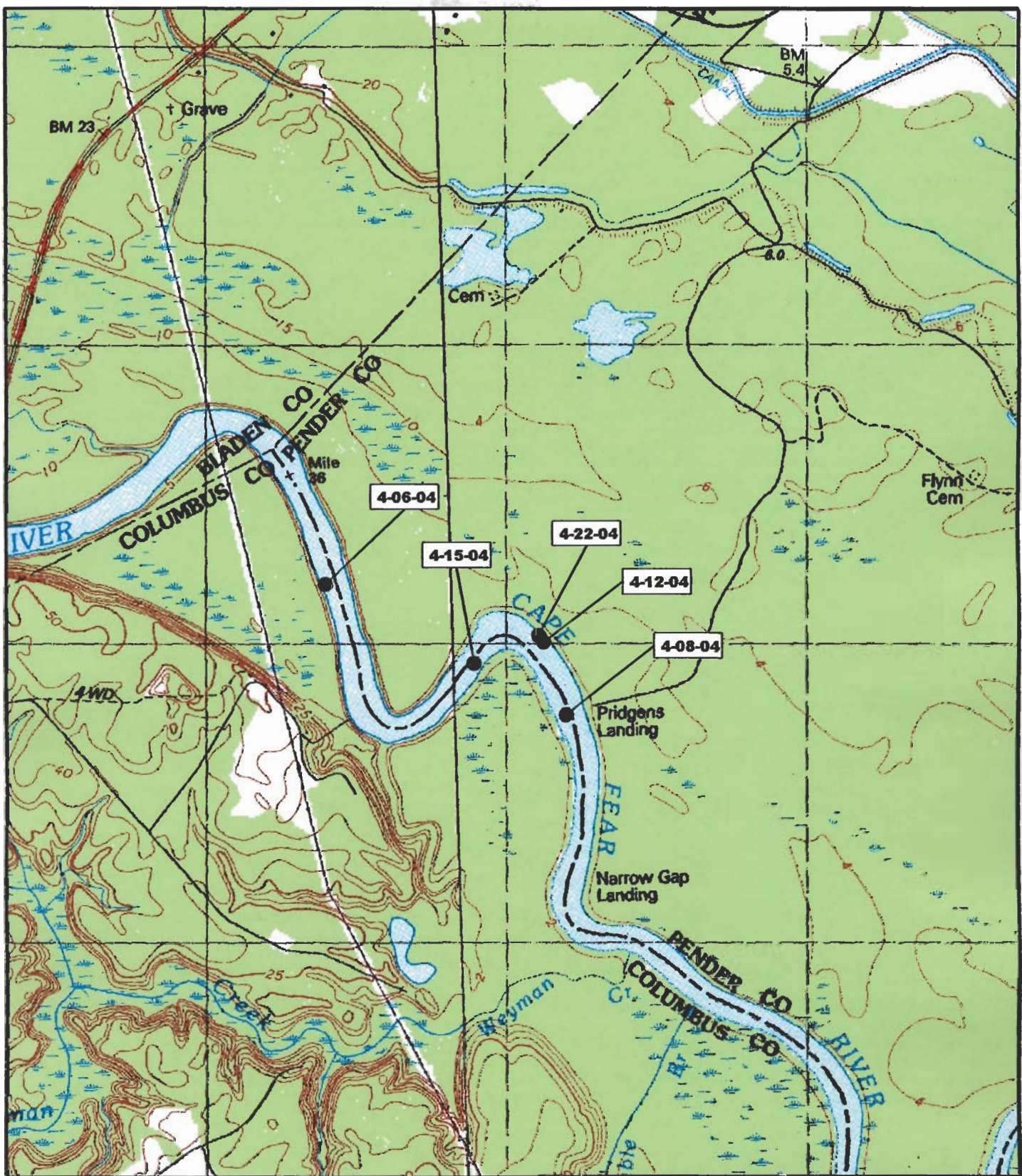


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5270**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5270-04

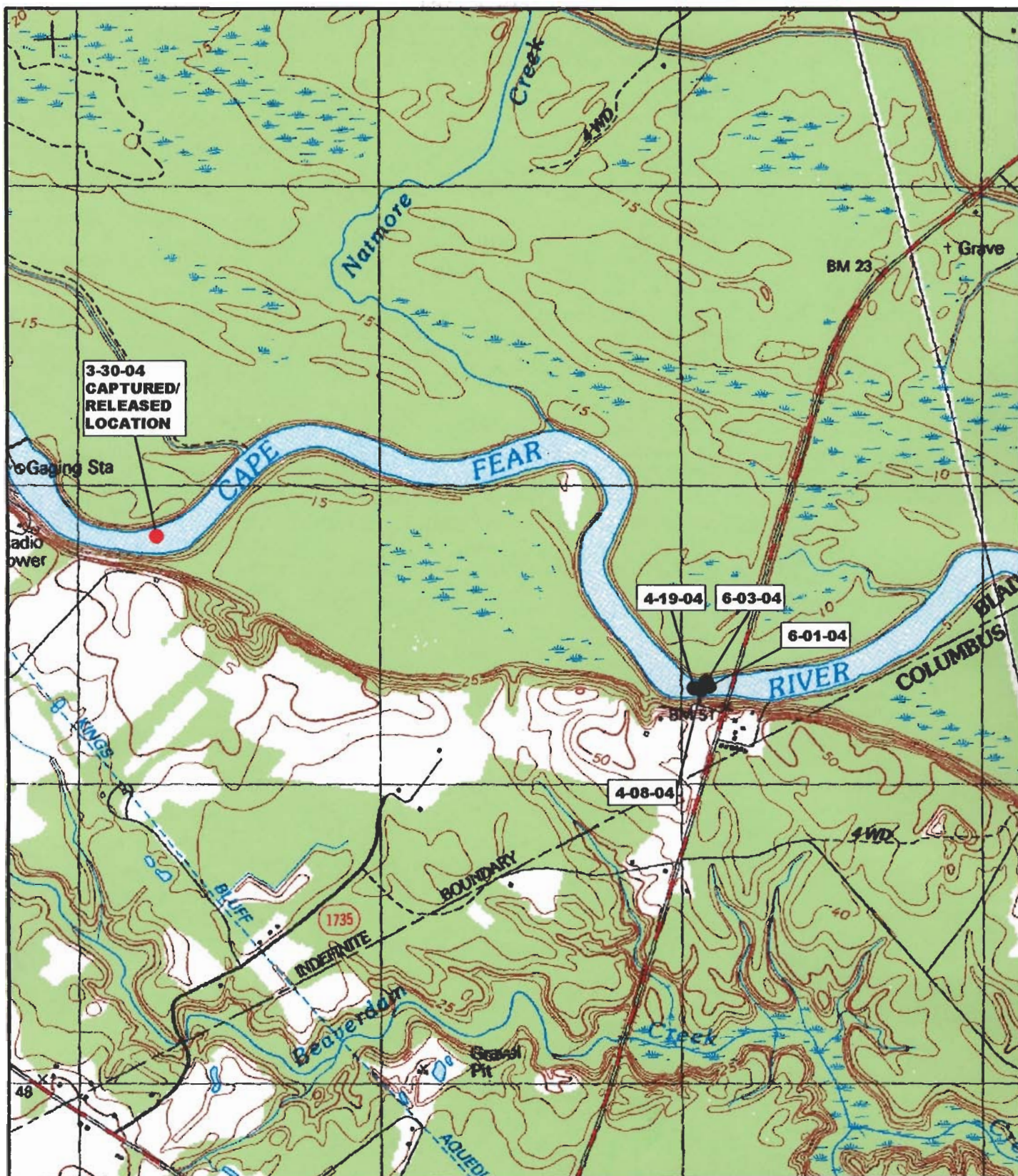


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-5139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000



SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5271

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/13/04

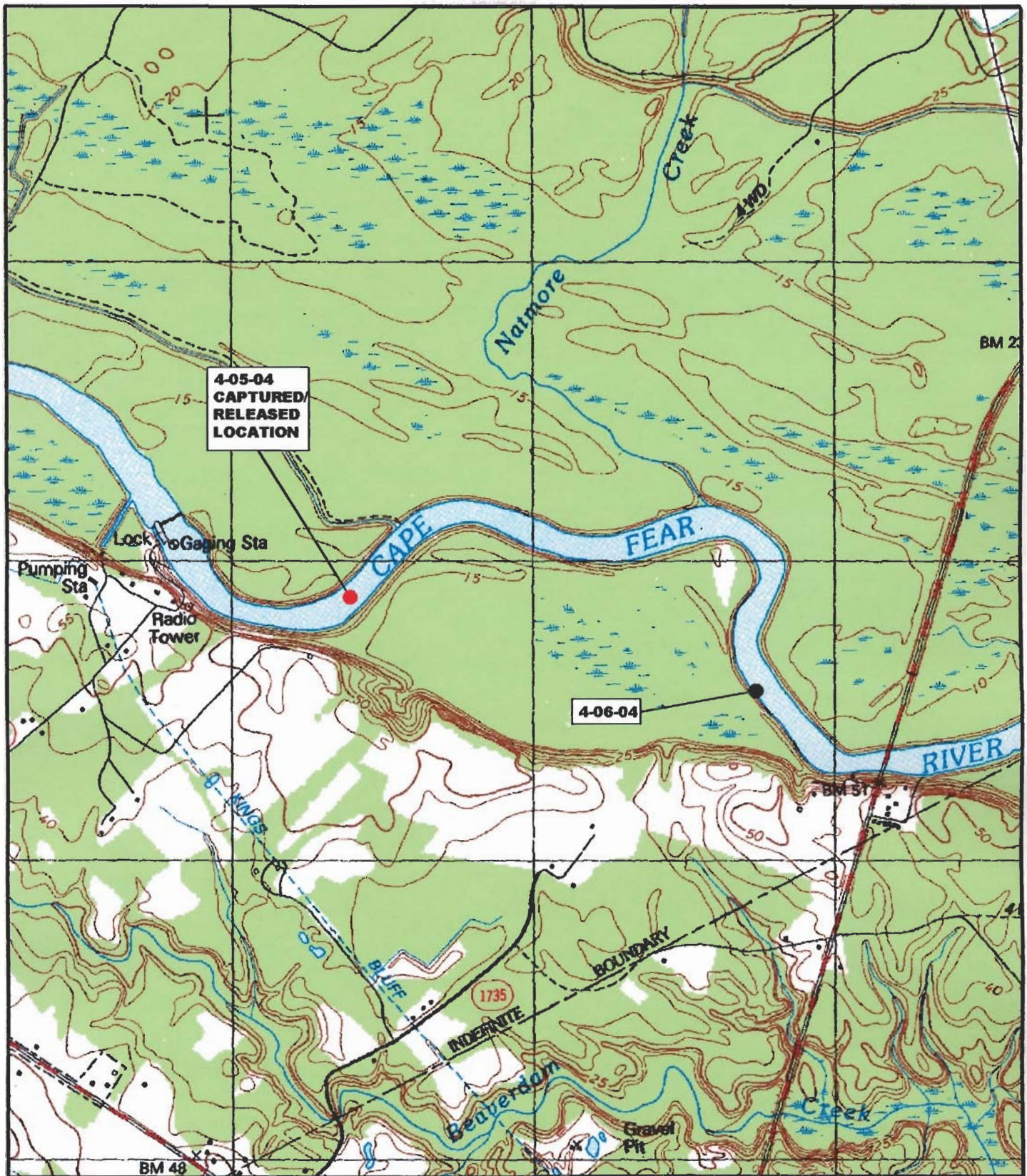
FILE: CZR5271-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9138

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5272

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

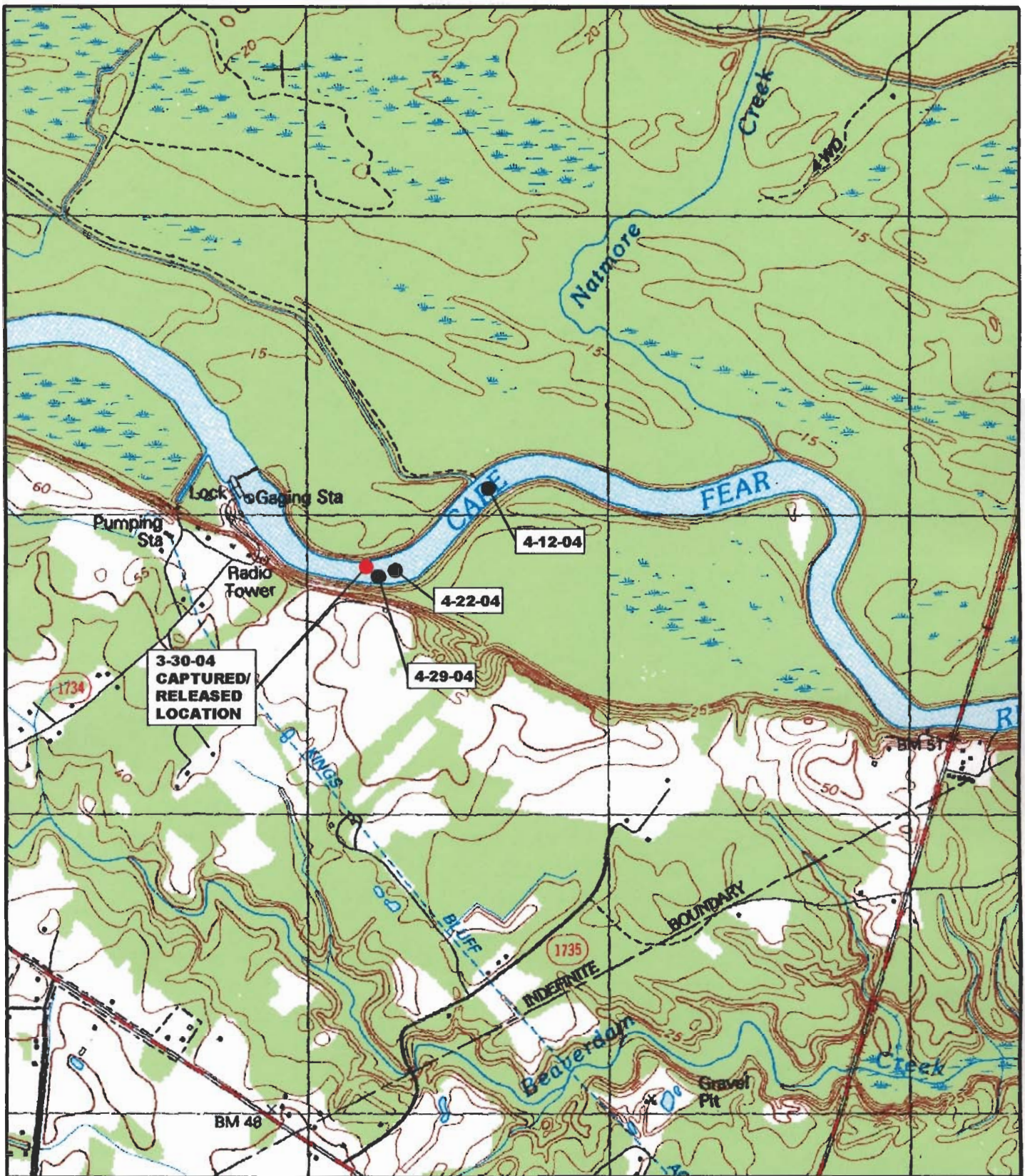
FILE: CZR5272-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-6253  
FAX 910/392-9138

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3600  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5273

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5273-04

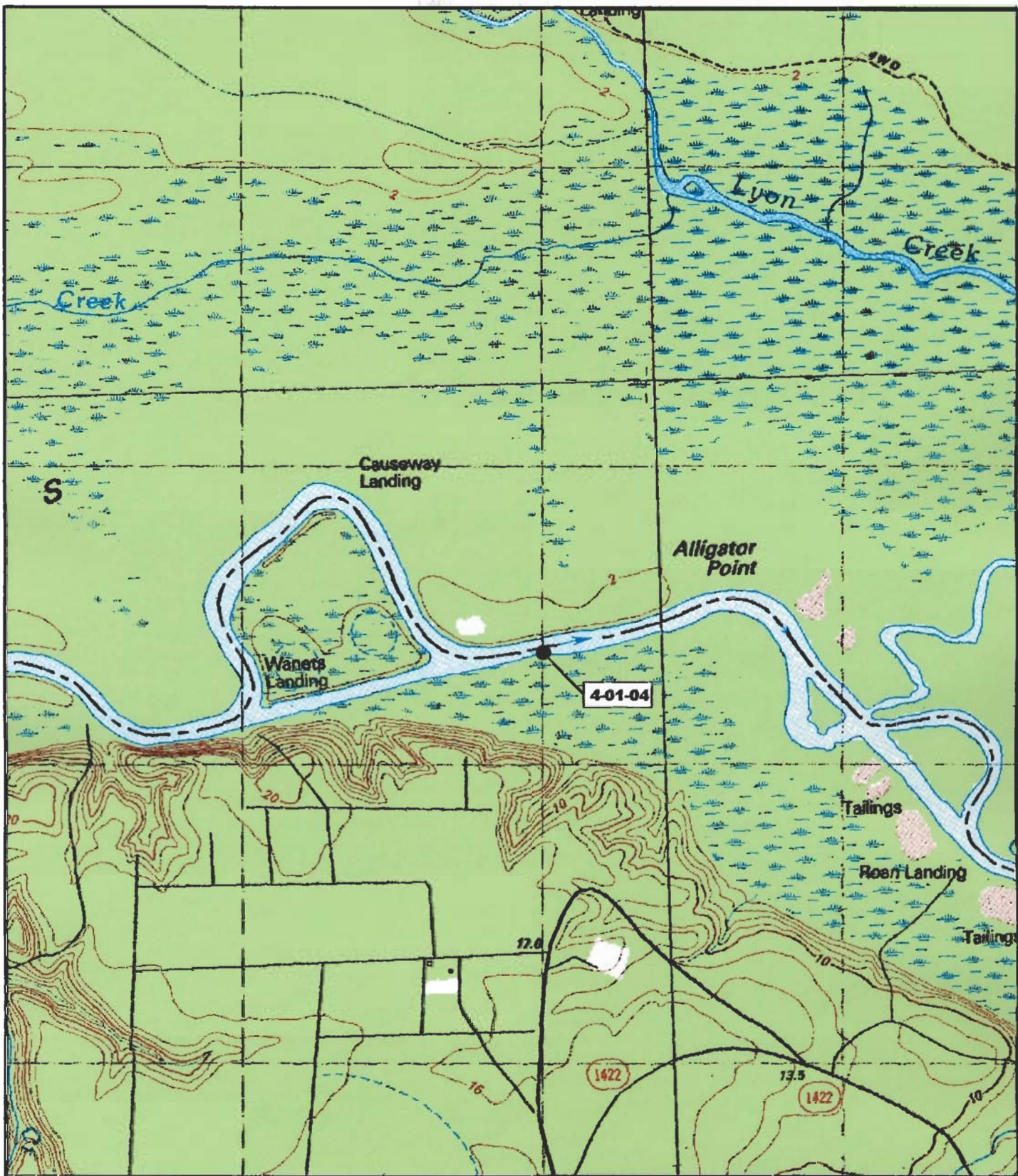


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5273**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5273-04

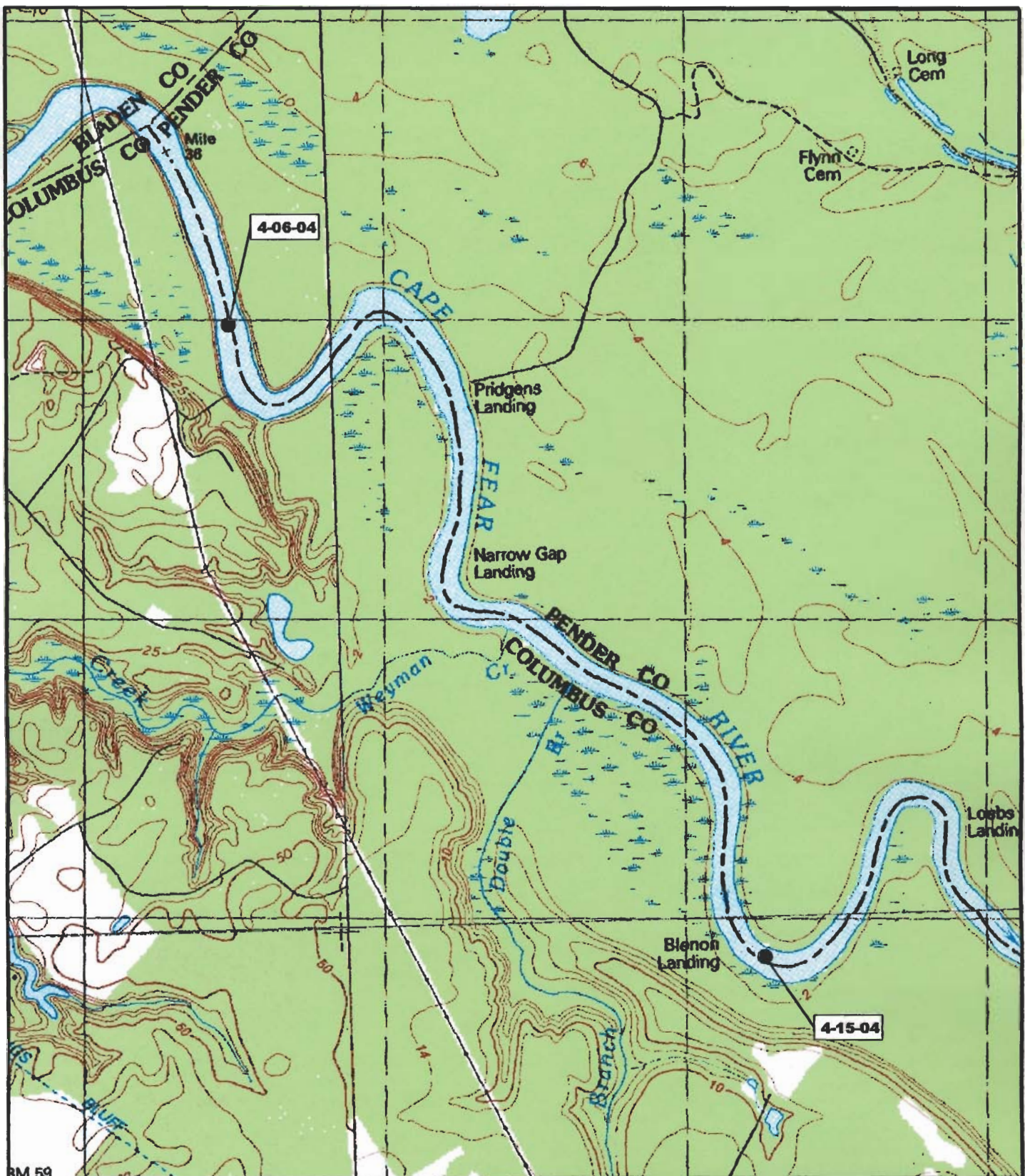


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9139

CP#1976.00

2 of 4





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5273

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5273-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

3 of 4





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3600  
  
 SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
 CZR5273**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
 DATE: 8/16/04

APPROVED BY:

DRAWN BY: TLJ/TJB

FILE: CZR5273-04

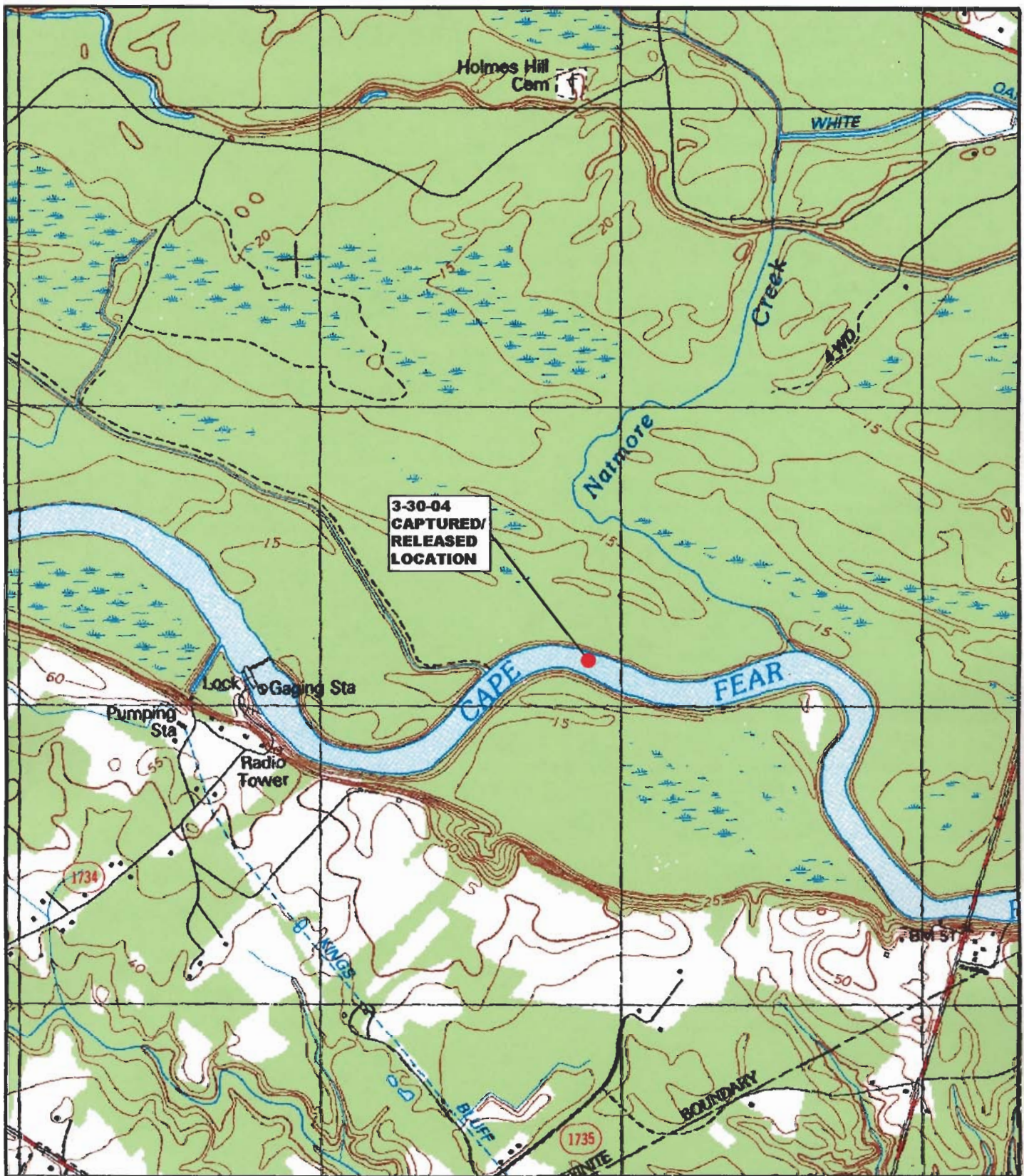


4700 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

4 of 4





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5274

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

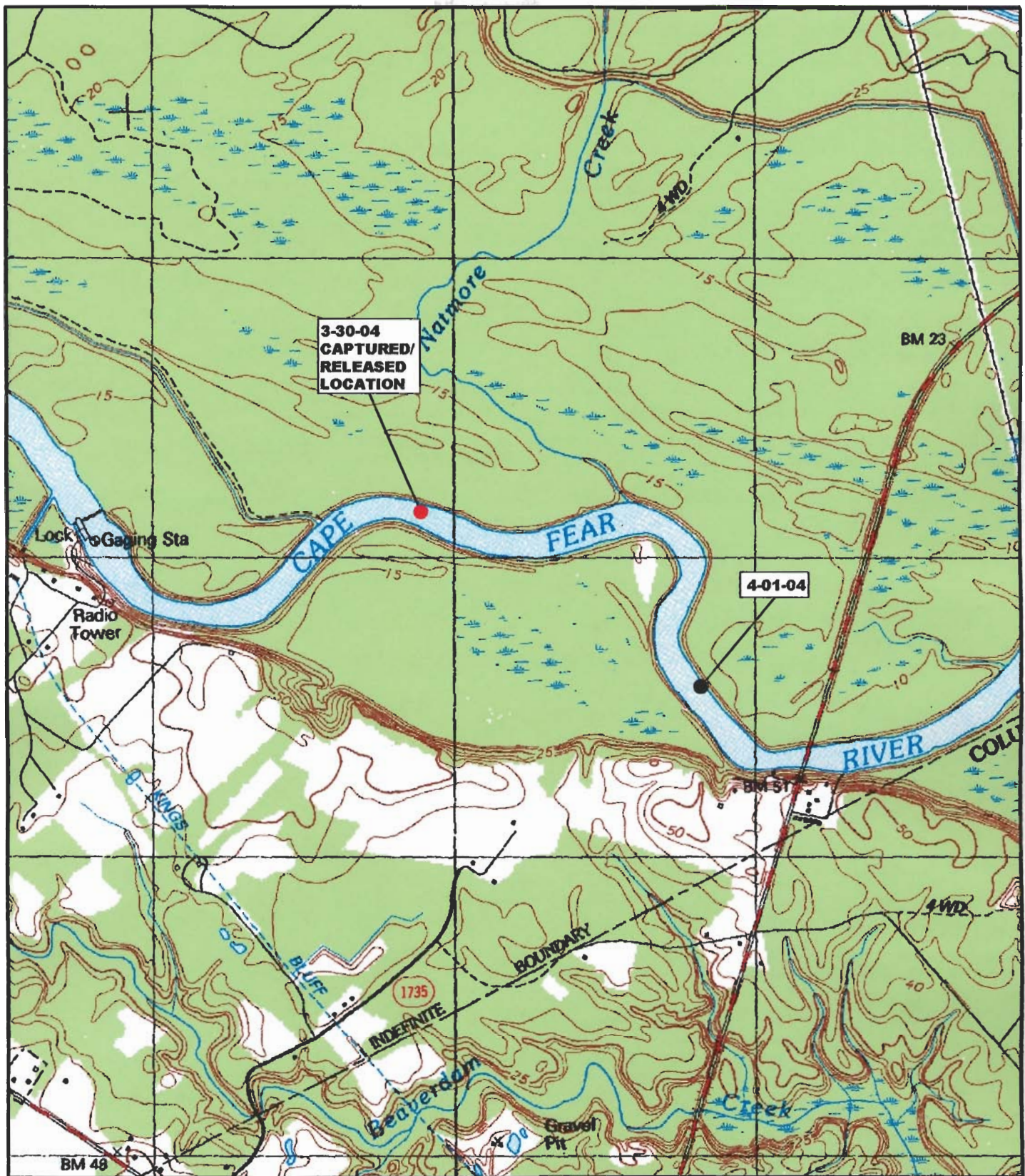
FILE: CZR5274-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5275

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN  
DATE: 8/13/04

APPROVED BY:

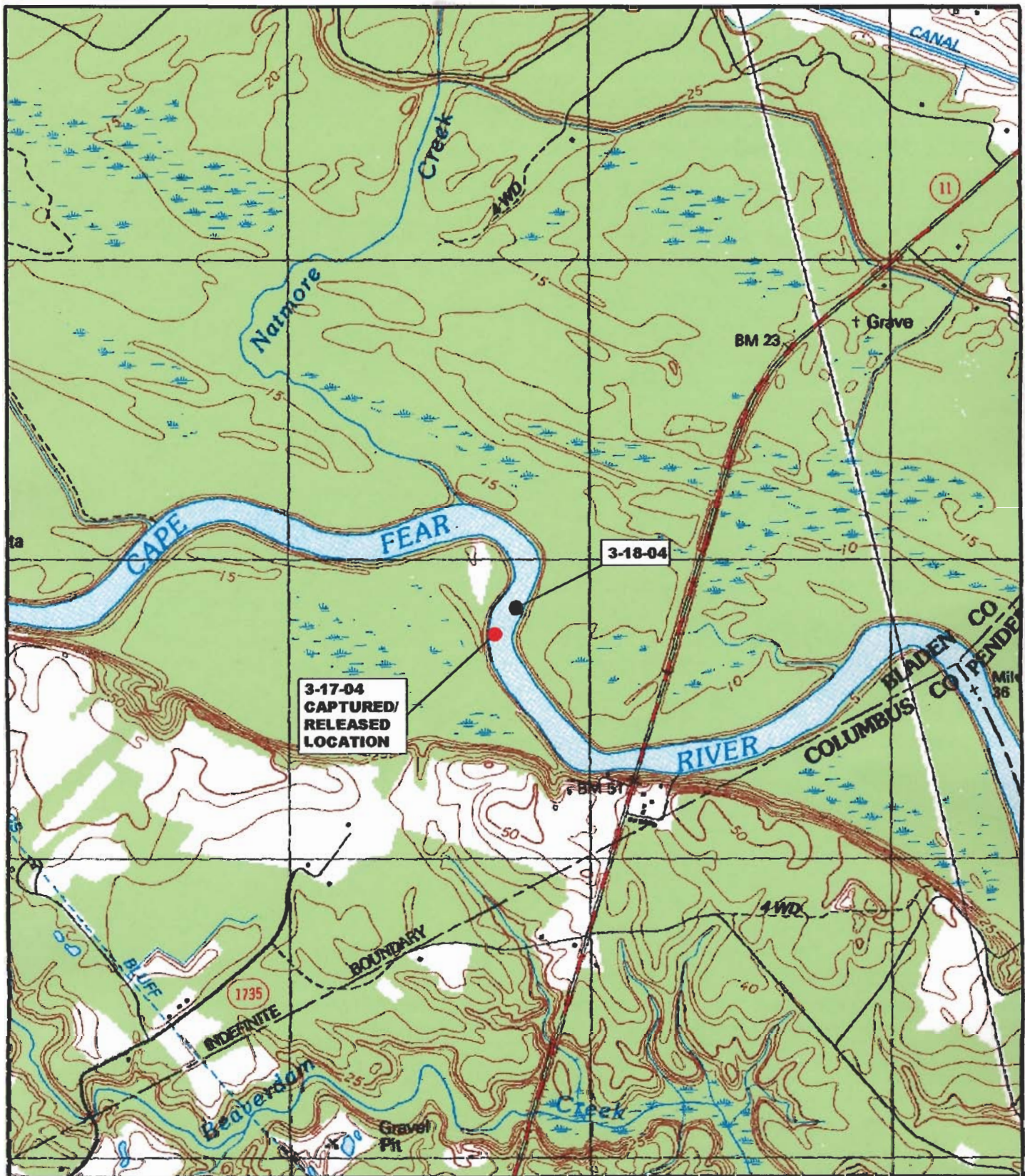
DRAWN BY: TLJ/TJB  
FILE: CZR5275-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8135

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-17-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5276

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

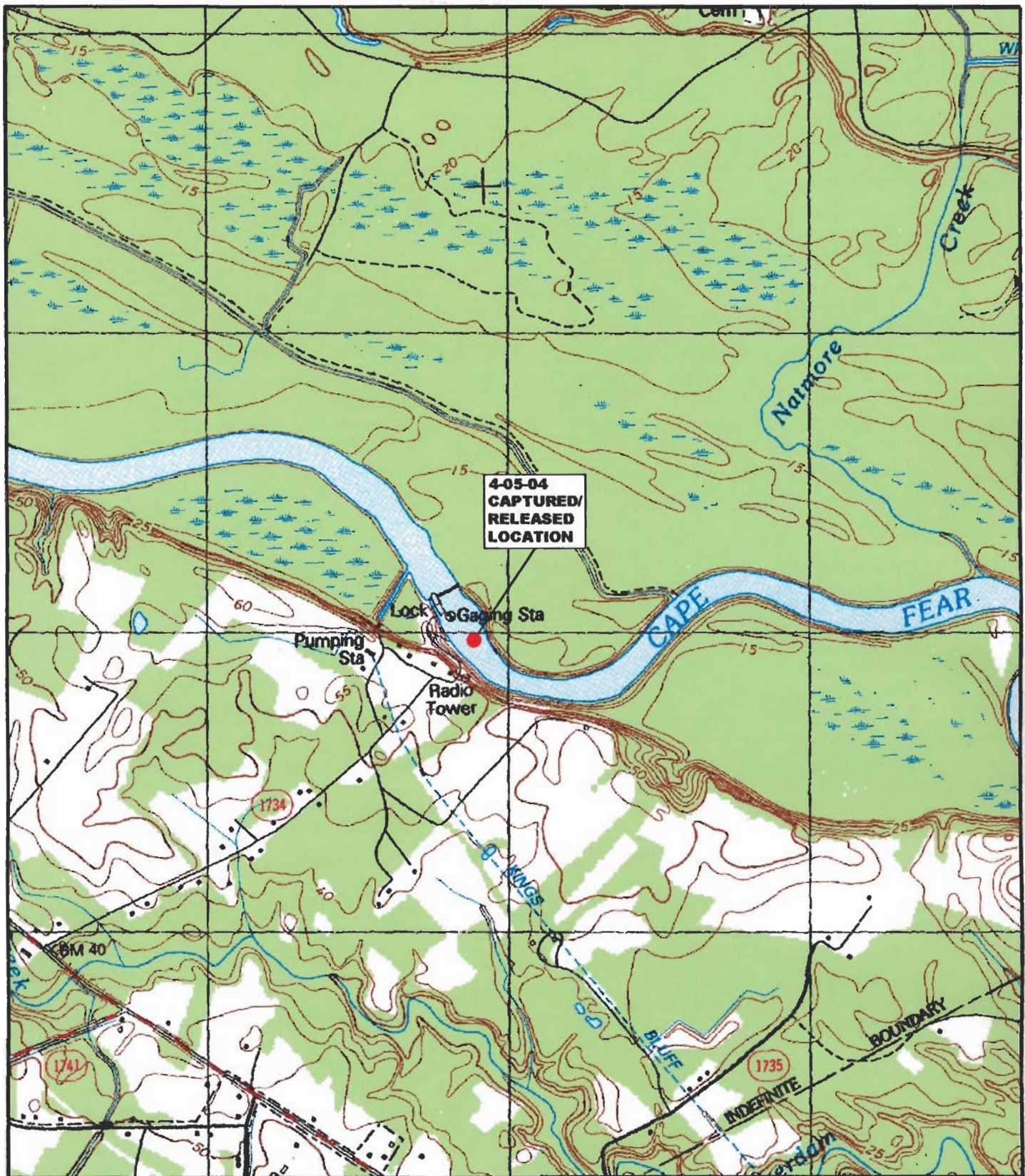
FILE: CZR5276-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-5138

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5277

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5277-04

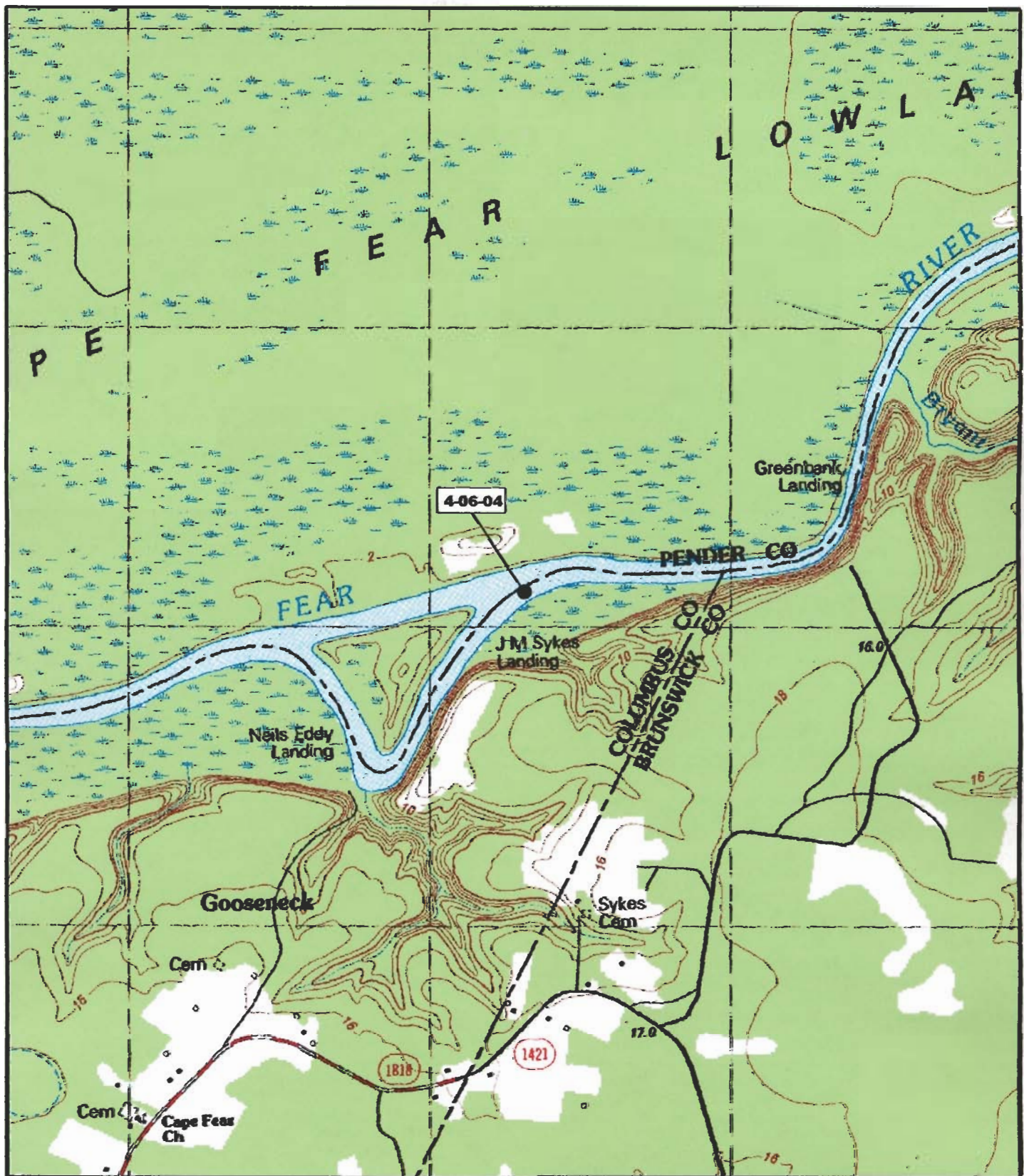


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 3





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5277

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

DATE: 8/13/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5277-04

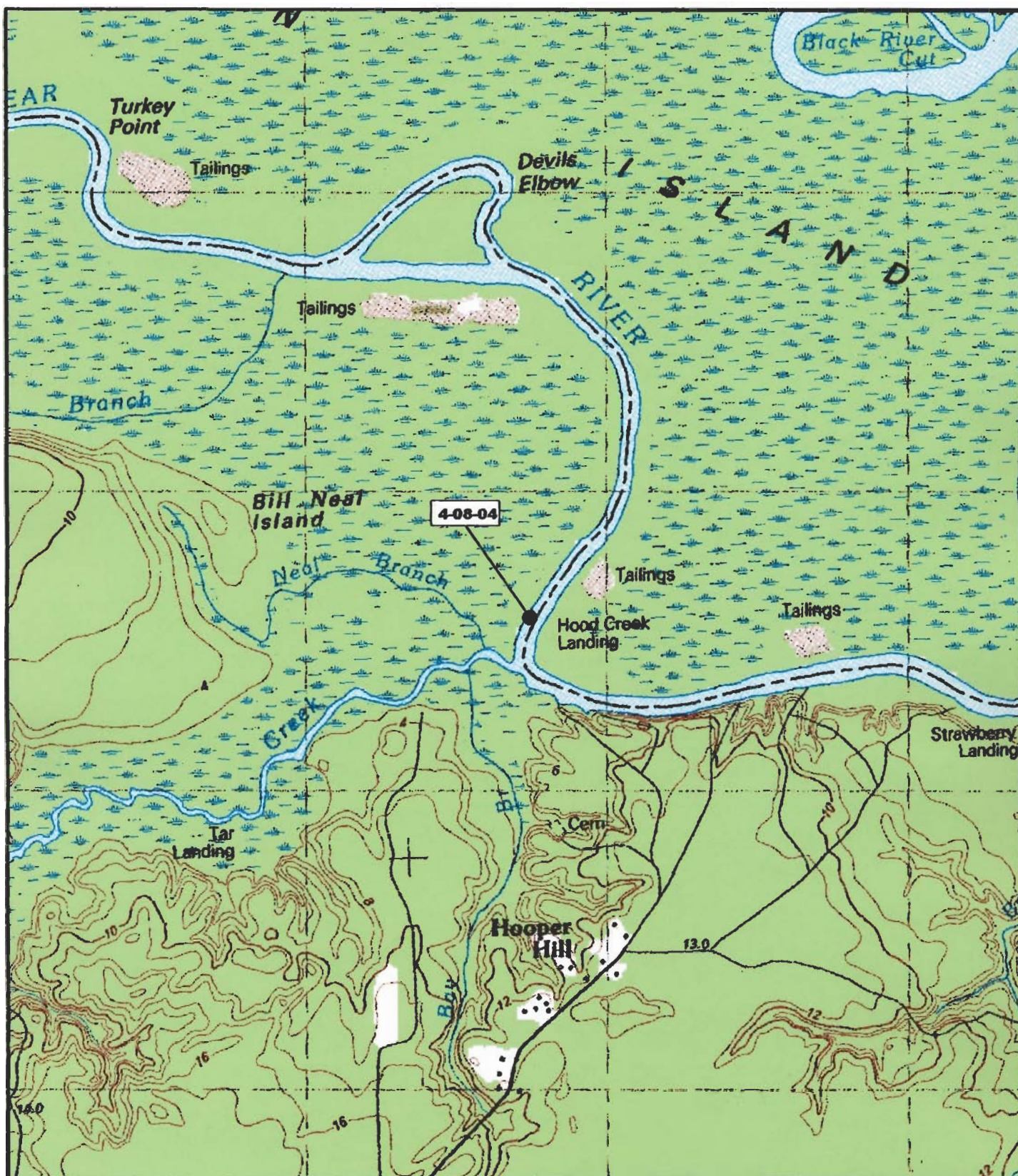


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

2 OF 3





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5277

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/13/04

APPROVED BY:

DRAWN BY: TLI/TJB  
FILE: CZR5277-04

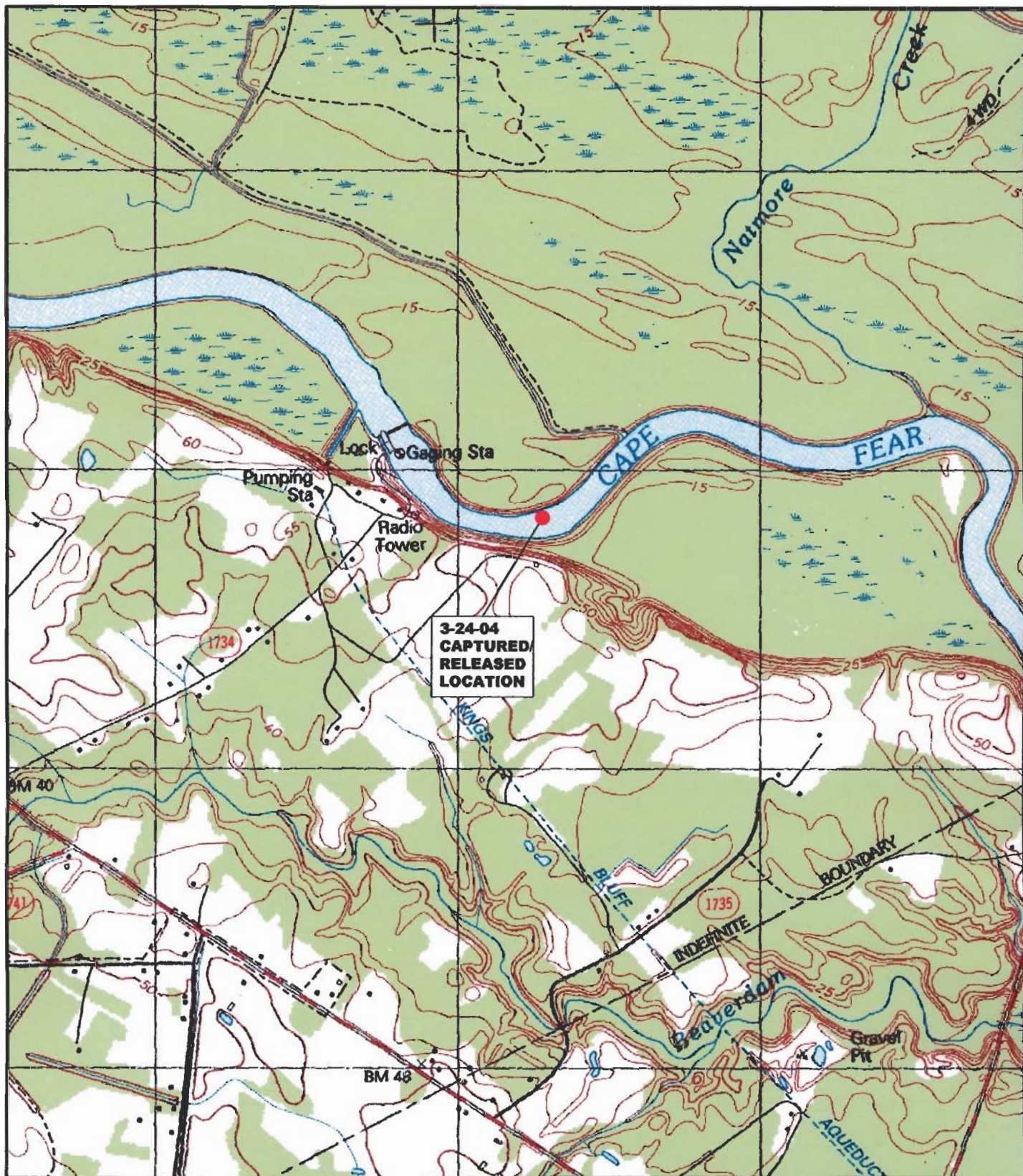


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

3 OF 3





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-24-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5278**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/13/04

FILE: CZR5278-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 OF 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-24-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5278**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/13/04

FILE: CZR5278-04

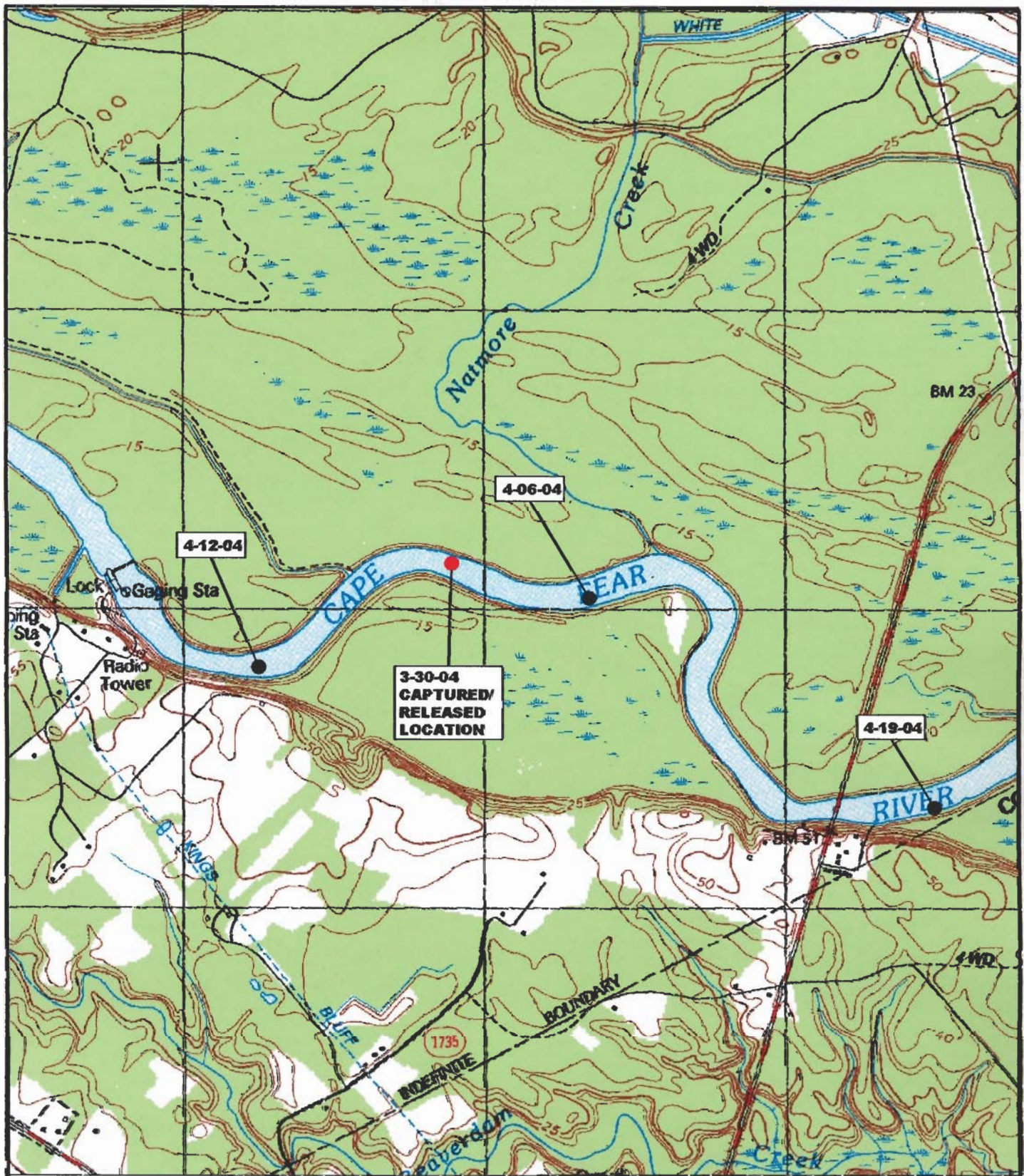


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 OF 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5279

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5279-04



4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9253  
FAX 910/382-9138

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5280

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5280-04

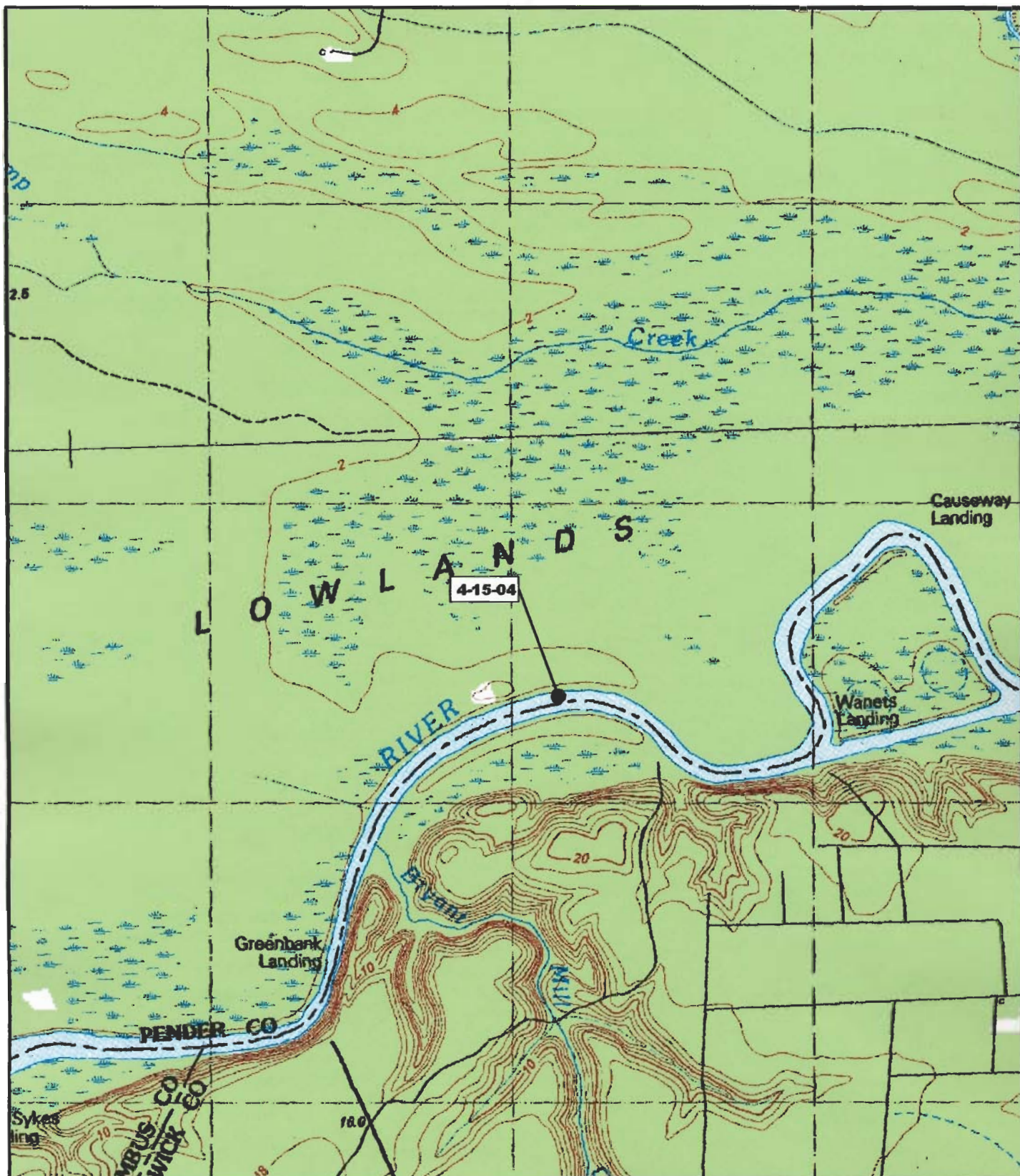


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

1 of 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5280

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5280-04

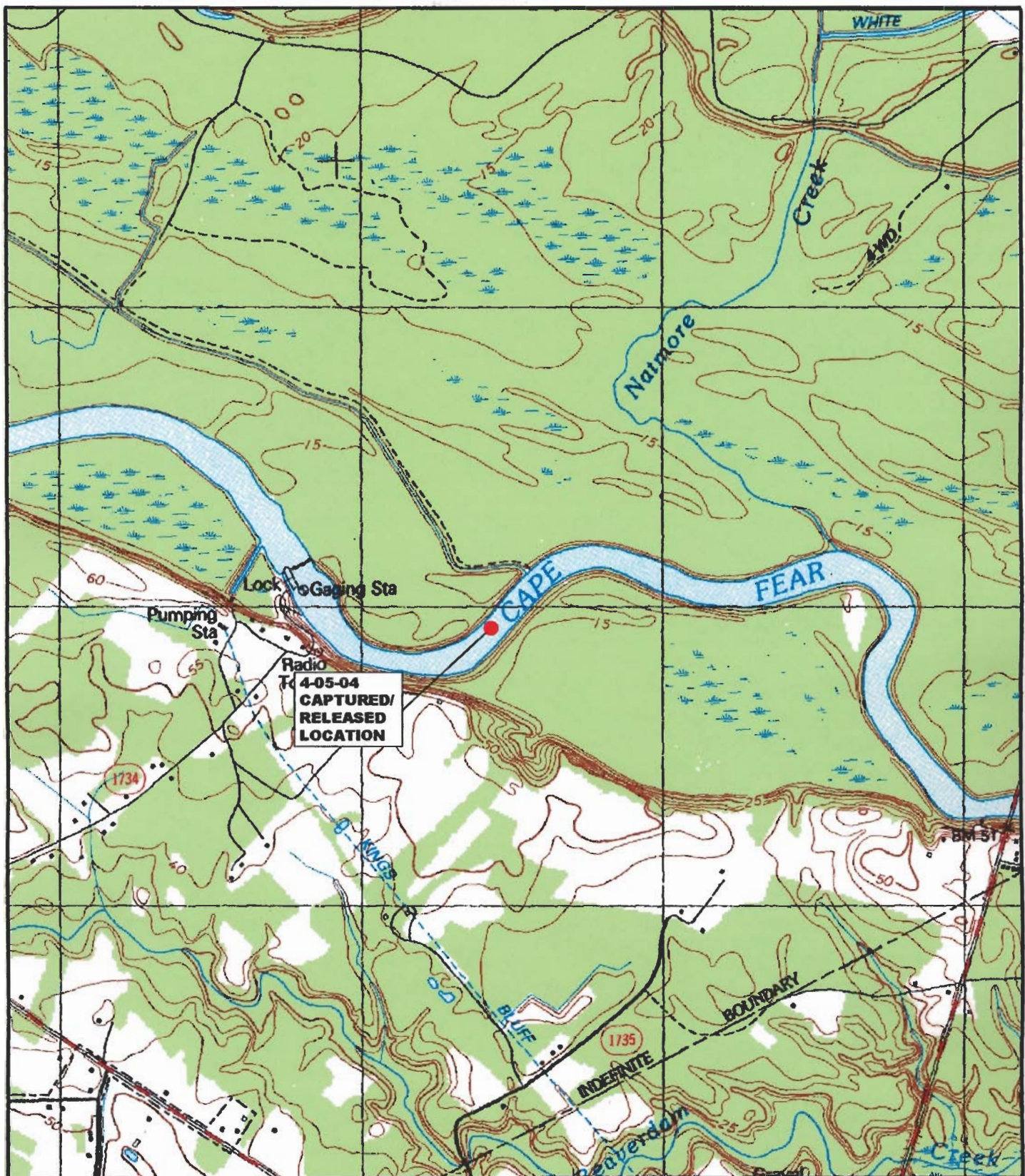


4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-8138

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5281

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: TLJ/TJB
DATE: 8/16/04		FILE: CZR5281-04

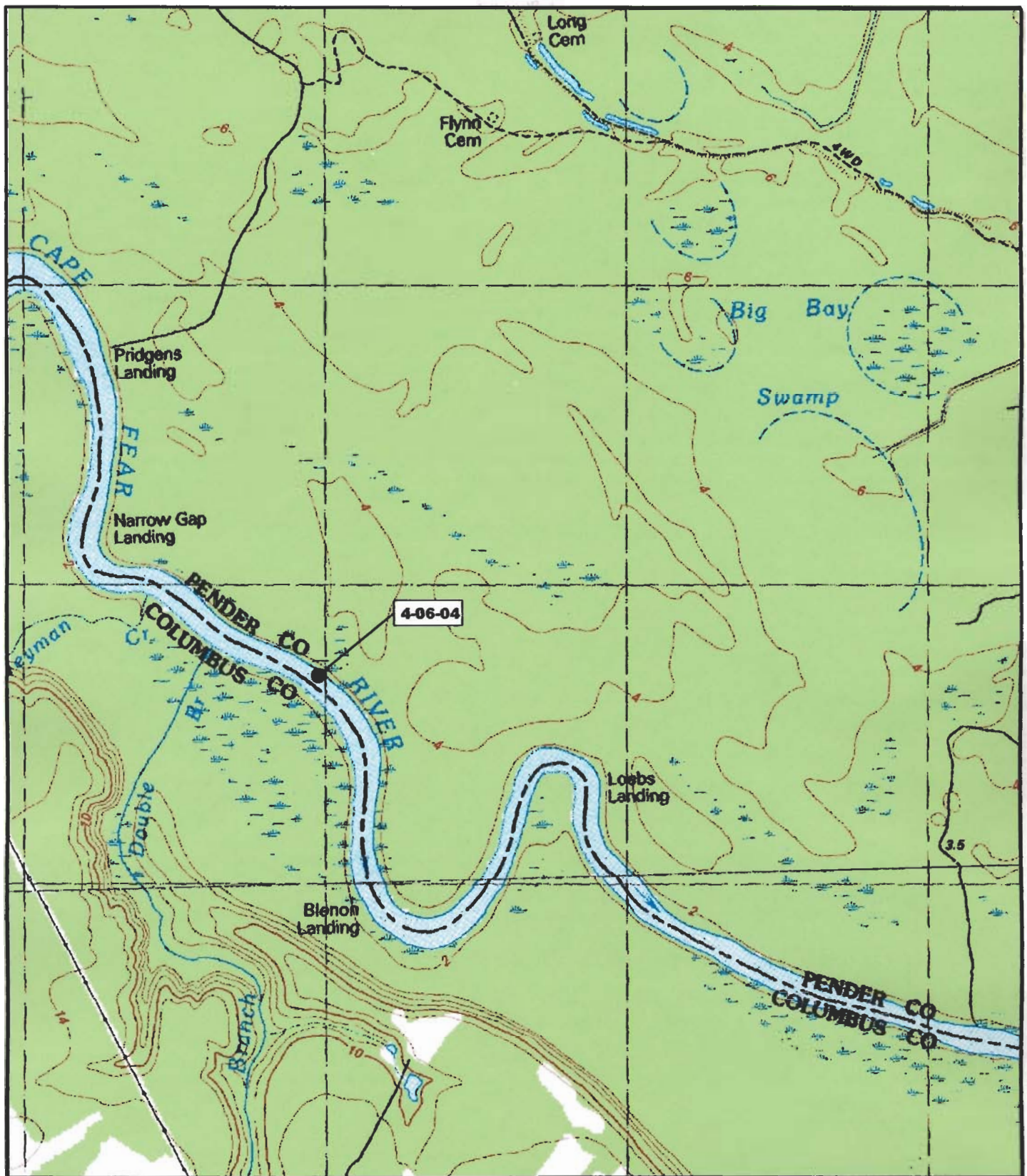


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8253  
FAX 910/382-8139

CP#1976.00

1 of 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5281

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: TLJ/TJB
DATE: 8/15/04		FILE: CZR5281-04

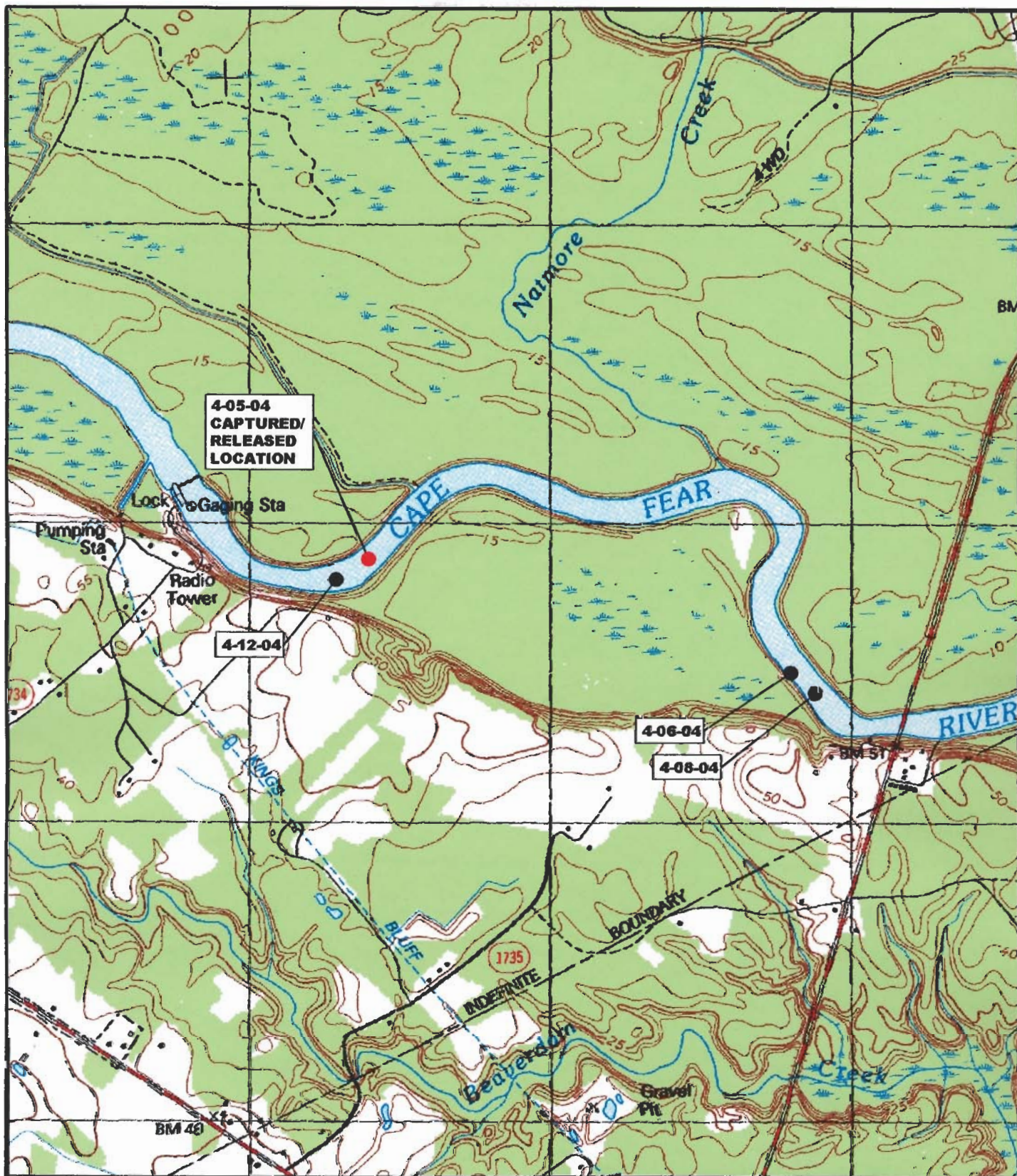


4709 COLLEGE ACRES DRIVE  
SUITE 3  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-8253  
FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5282**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

DRAWN BY: TJJ/TJB

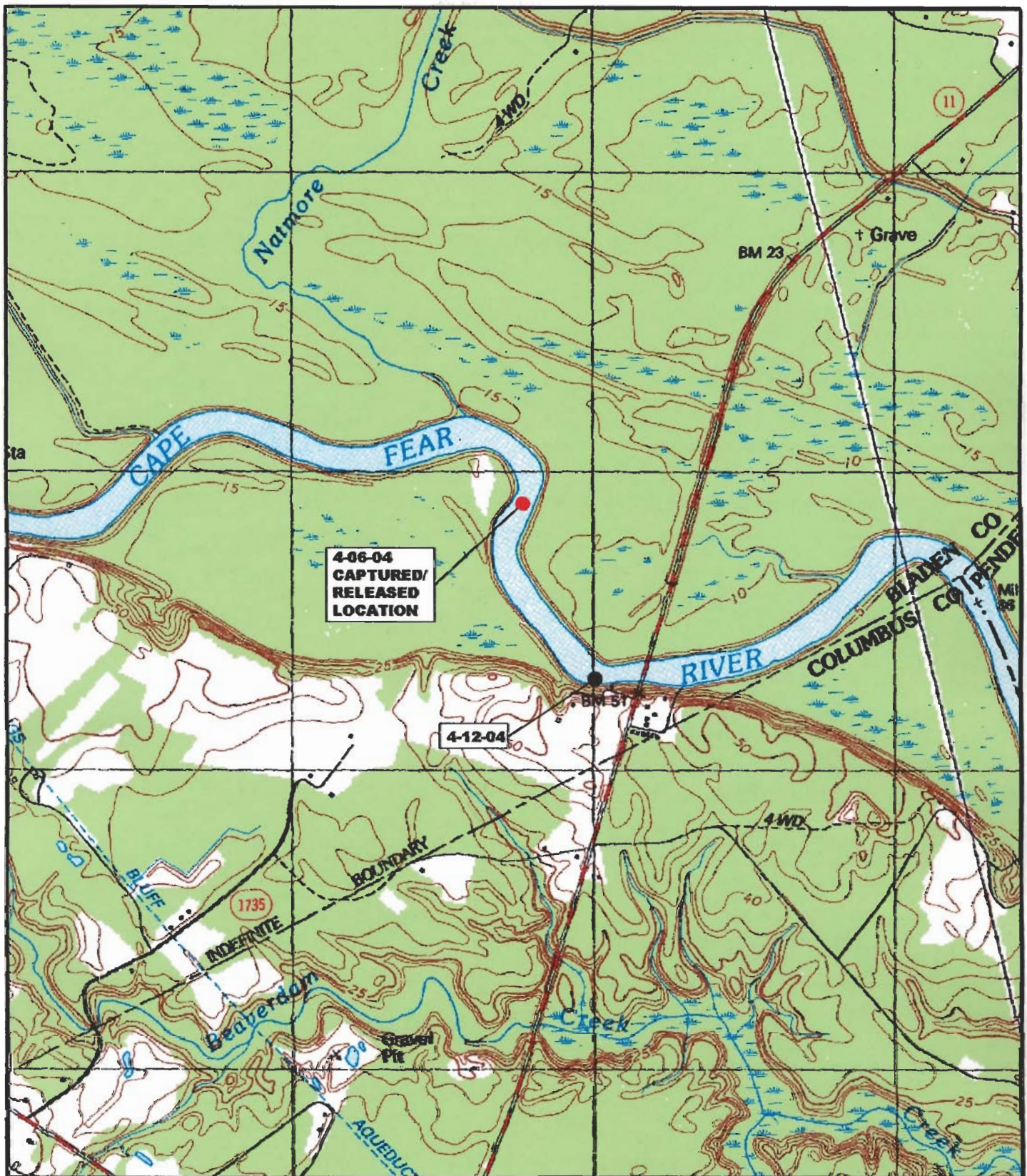
FILE: CZR5282-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-06-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5283

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLF/TJB

FILE: CZR5283-04

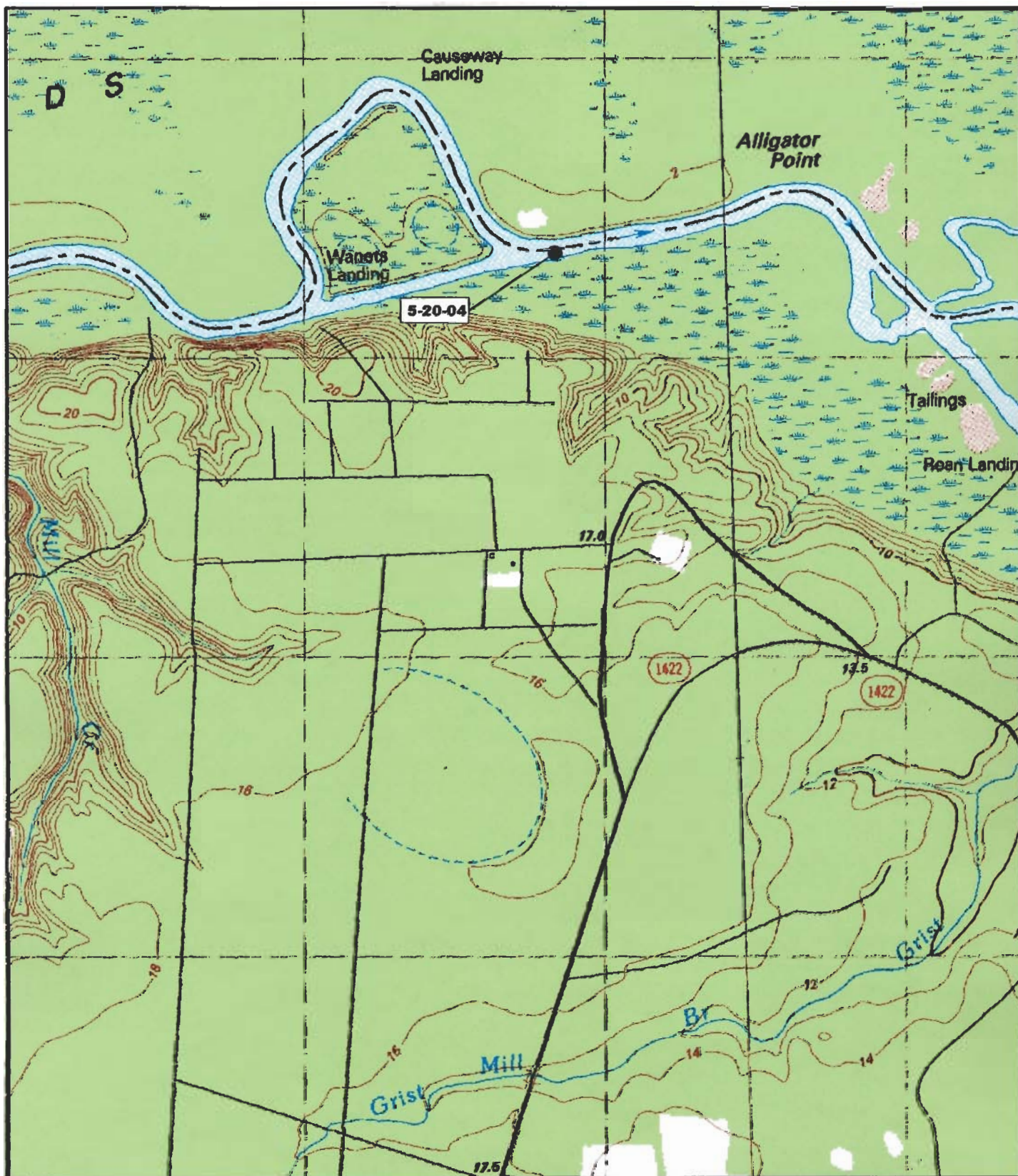


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9138

CP#1976.00

1 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-06-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5283

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5283-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000



SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5284

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB

FILE: CZR5284-04

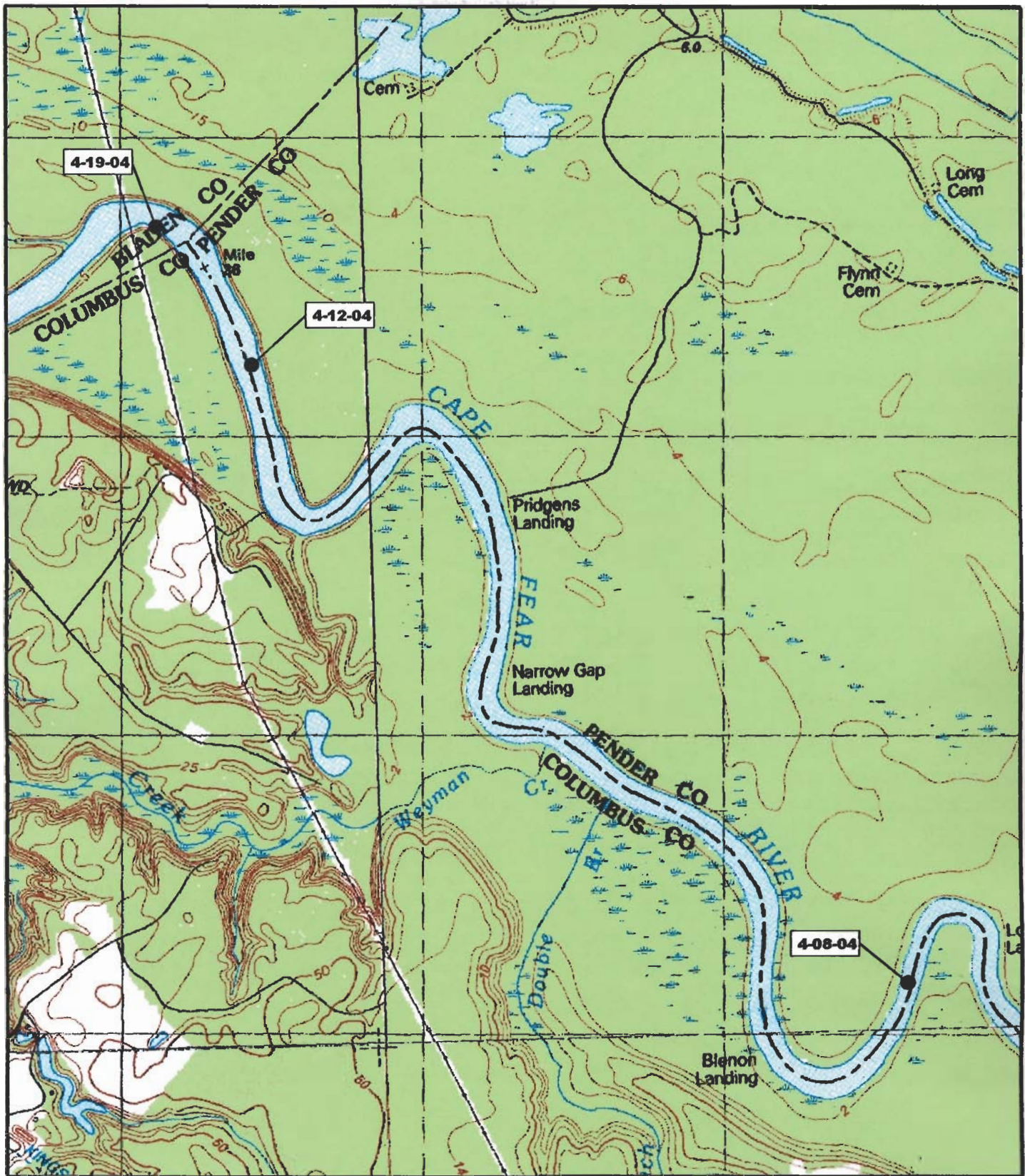


4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-8235  
FAX 910/382-8139

CP#1976.00

1 of 2





**LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5284

**MANUAL FISH TRACKING DATA  
WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5284-04

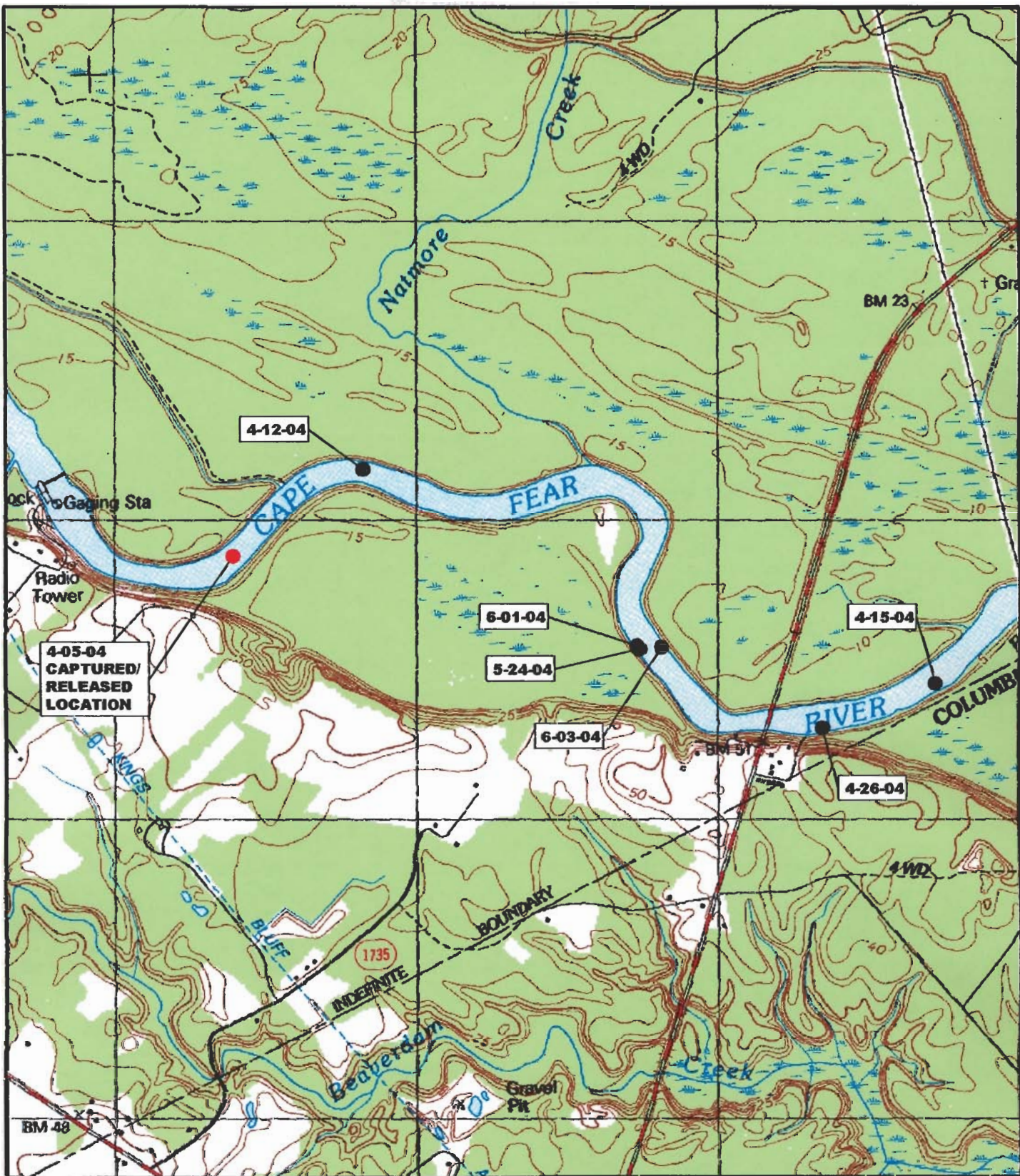


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9233  
FAX 910/382-9138

CP#1976.00

2 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5285

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:  
*[Signature]*

DRAWN BY: TJJ/TJB  
FILE: CZR5285-04

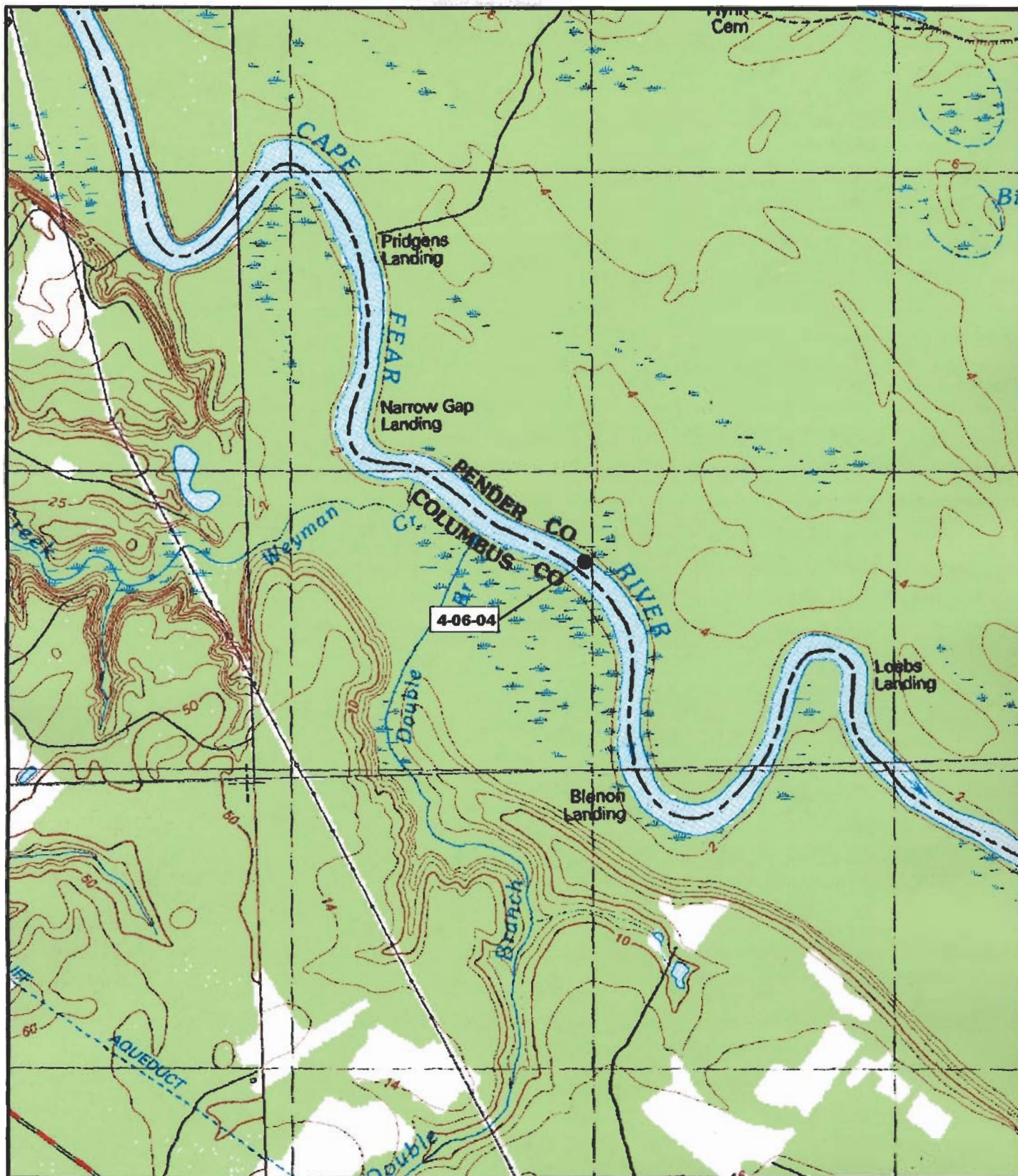


4700 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9153  
FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5285

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

*[Signature]*

DRAWN BY: TLJ/TJB  
FILE: CZR5285-04

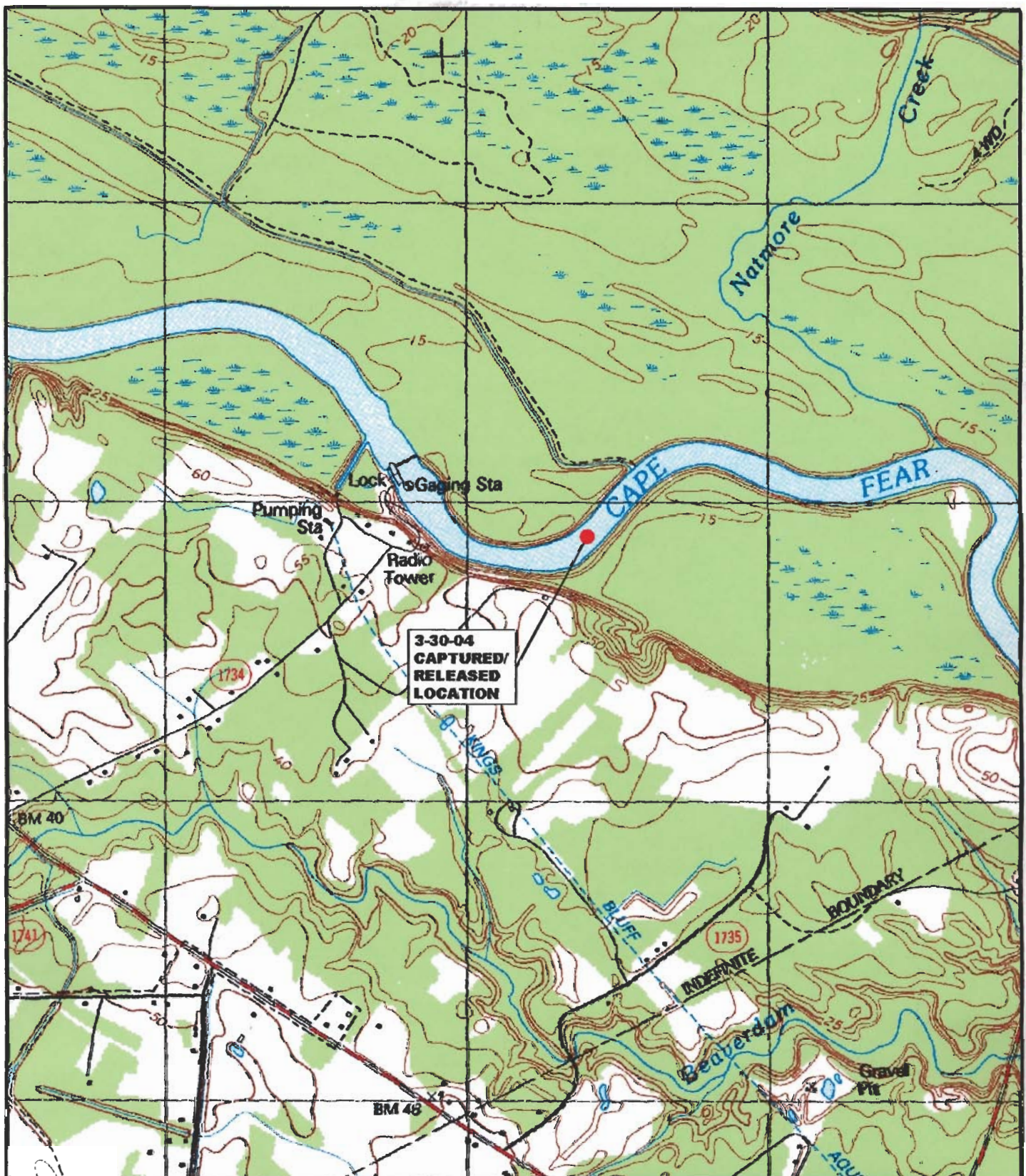


4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00

2 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
CZR5286**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

DRAWN BY: TLJ/TJB  
FILE: CZR5286-04



4709 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/382-9233  
FAX 910/382-9139

CP#1976.00





# **LEGEND**

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5287

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN  
DATE: 8/16/04

APPROVED BY:

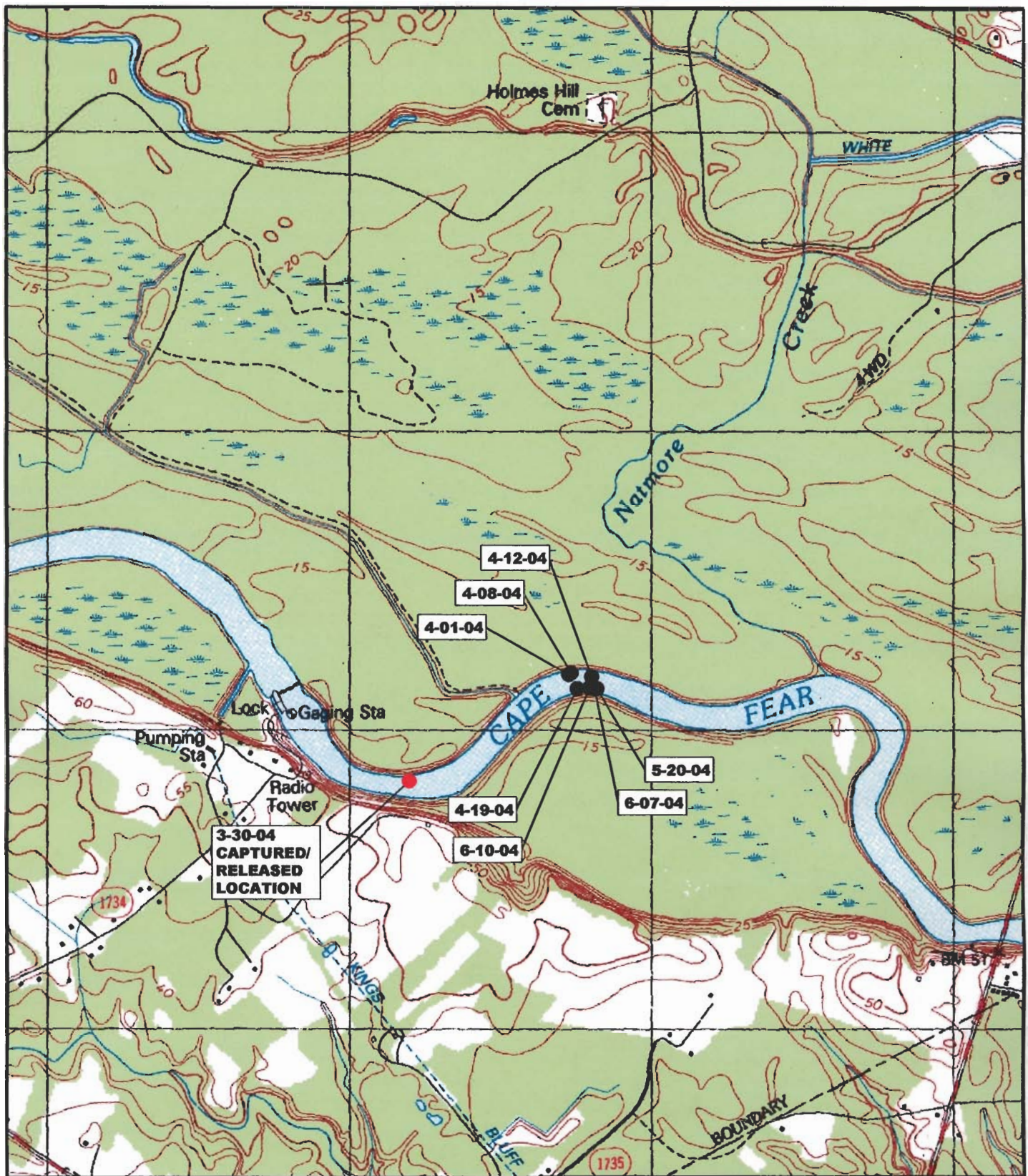
DRAWN BY: TLJ/TJB  
FILE: CZR5287-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 810/392-9255  
FAX 810/392-9139

CP#1976.00





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
 CZR5288**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

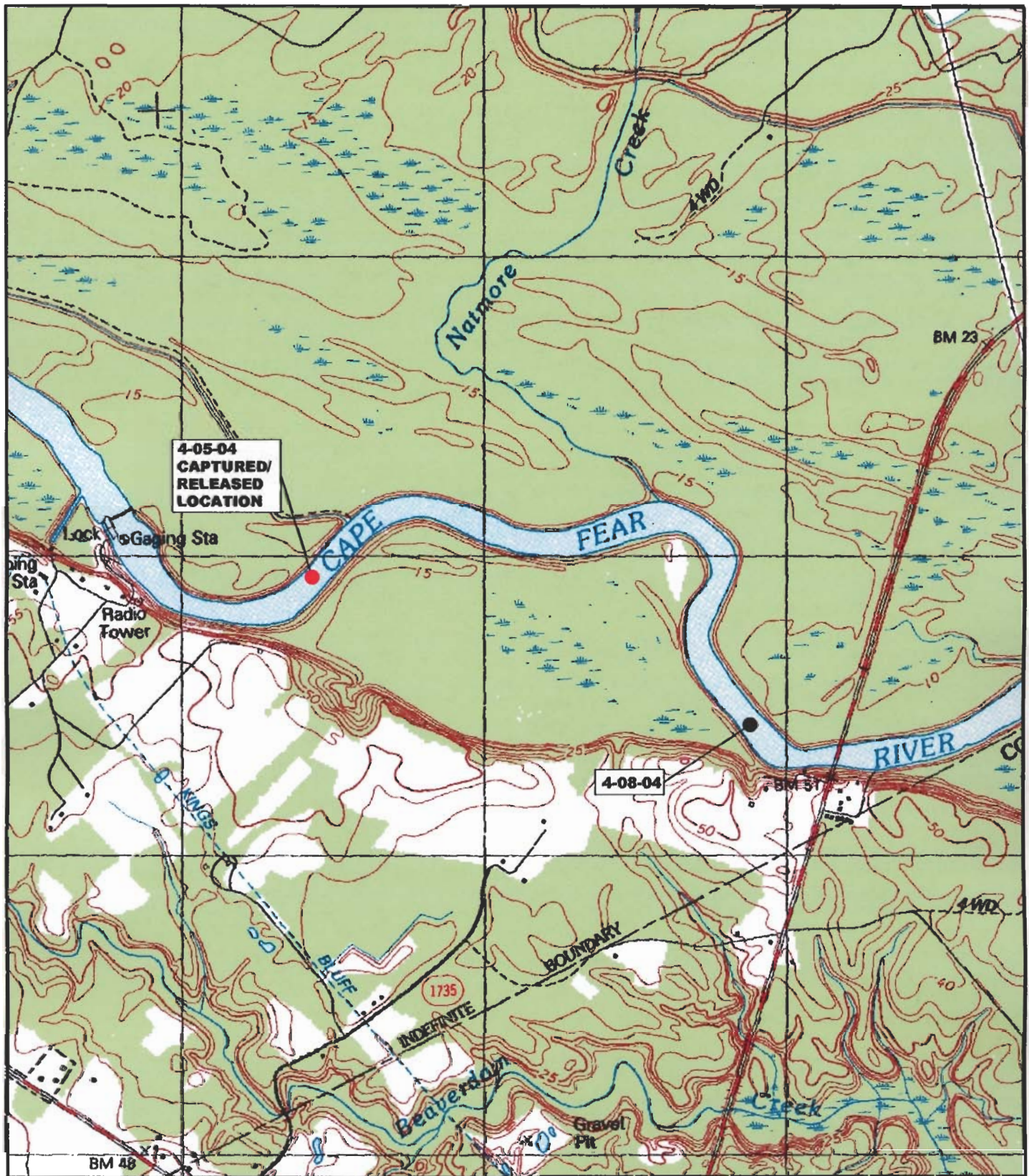
FILE: CZR5288-04



4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00





#### LEGEND

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
 CZR5289

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5289-04

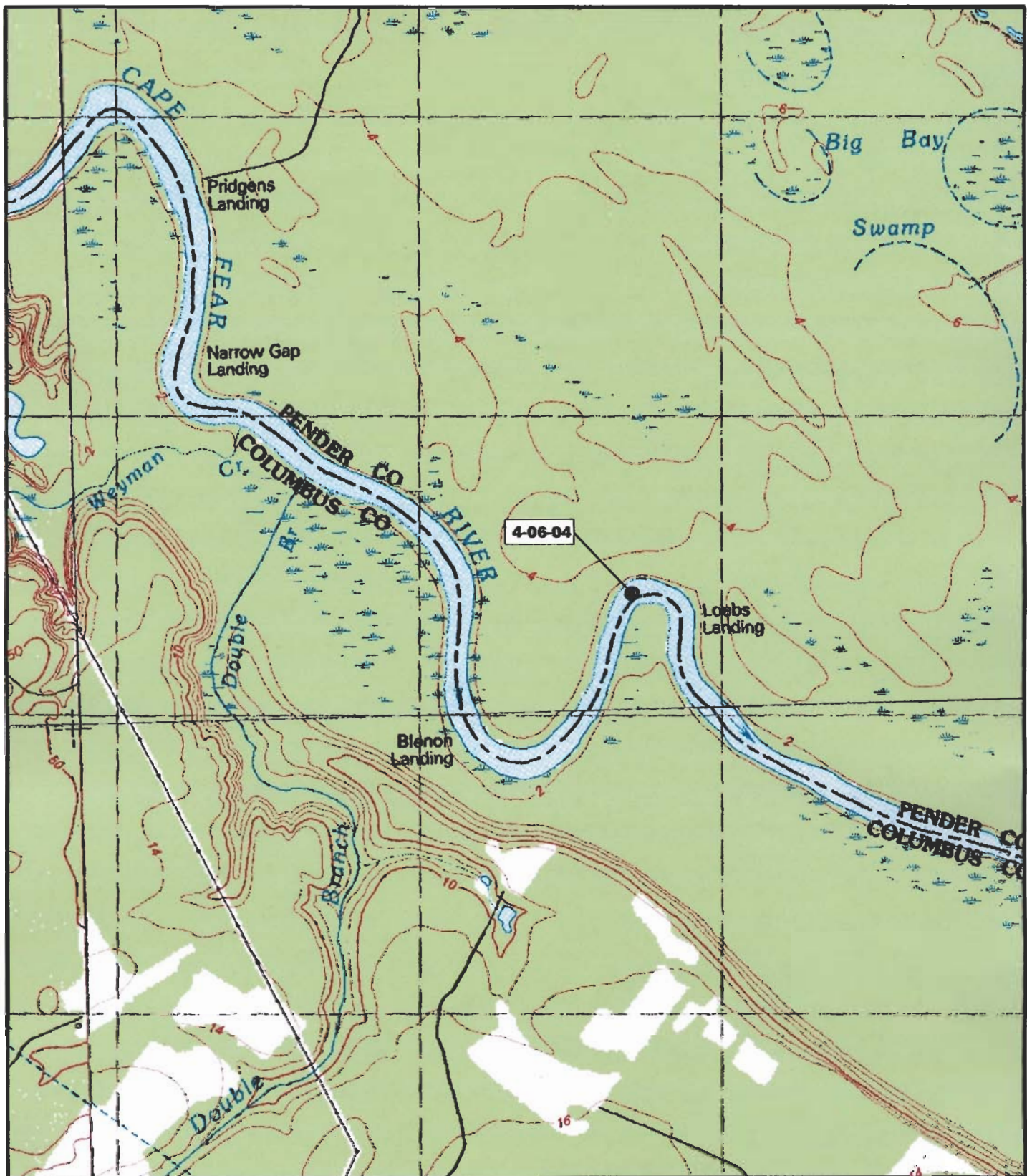


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

1 of 2





# **LEGEND**

- **CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 4-05-04**
- **SITE OF RELOCATED FISH**

0 1500 3000  
  
 SCALE IN FEET



**SITE OF RELOCATED AMERICAN SHAD  
 CZR5289**

## **MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE**

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5289-04

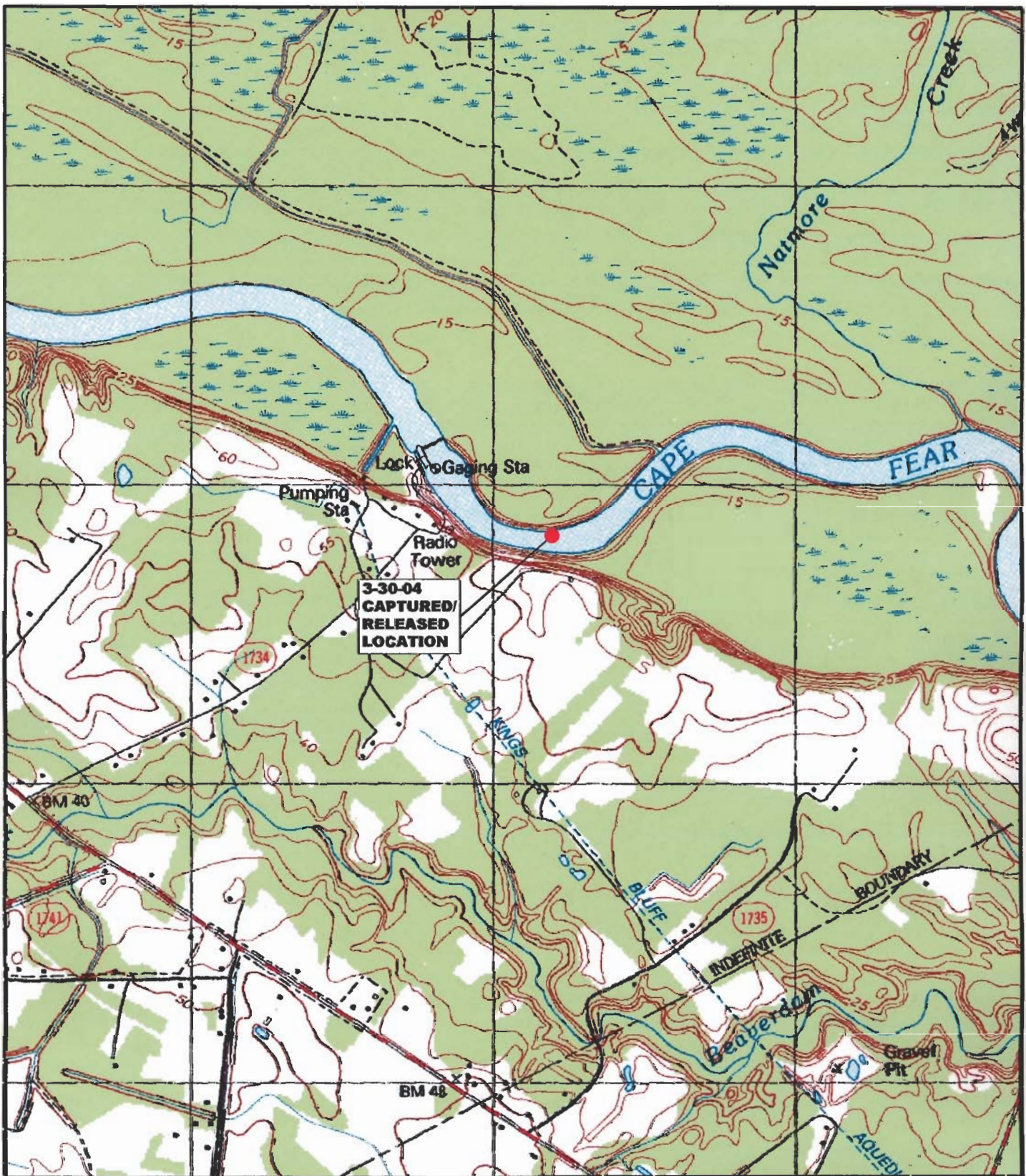


4709 COLLEGE ACRES DRIVE  
 SUITE 2  
 WILMINGTON, NORTH CAROLINA 28403  
 TEL 910/392-9253  
 FAX 910/392-9139

CP#1976.00

2 of 2





#### LEGEND

- CAPTURE AND RELEASE LOCATION OF FISH TAGGED ON 3-30-04
- SITE OF RELOCATED FISH

0 1500 3000  
SCALE IN FEET



SITE OF RELOCATED AMERICAN SHAD  
CZR5290

#### MANUAL FISH TRACKING DATA WILMINGTON USACOE FISH PASSAGE

SCALE: AS SHOWN

APPROVED BY:

DRAWN BY: TLJ/TJB

DATE: 8/16/04

FILE: CZR5290-04



4708 COLLEGE ACRES DRIVE  
SUITE 2  
WILMINGTON, NORTH CAROLINA 28403  
TEL 910/392-9253  
FAX 910/392-9139

CP#1976.00



## **APPENDIX D**

### **LIST OF COORDINATES COLLECTED DURING TAGGING AND MANUAL TRACKING**



Appendix D. List of coordinates (UTM, NAD27, 17N, meters) collected during tagging and manual tracking.

Tag #	Date	Northing	Easting
CZR5004	2/24/2004	3792914.755	779595.351
	2/28/2004	3793043.116	779871.190
	3/5/2004	3792997.021	779760.804
	3/8/2004	3792965.955	779683.436
	3/11/2004	3792701.918	780434.419
	3/15/2004	3792693.682	780428.312
	3/25/2004	3792560.382	780562.278
	4/12/2004	3798409.251	774677.636
	4/15/2004	3807099.061	754879.941
	4/19/2004	3810082.376	750372.601
	4/22/2004	3806337.397	762253.755
	4/26/2004	3809106.307	752478.072
	4/29/2004	3809199.223	752450.317
	5/10/2004	3809805.030	749295.908
CZR5009	3/5/2004	3792915.290	780320.109
	3/8/2004	3792114.410	780795.222
	4/26/2004	3808584.793	753305.979
CZR5010	6/15/2004	3795989.235	780664.220
CZR5011	3/29/2004	3806971.225	755034.791
	4/6/2004	3807156.390	754598.967
	4/8/2004	3806470.516	756251.670
	4/15/2004	3806951.828	754523.194
	4/22/2004	3807984.928	753498.221
	6/1/2004	3809993.185	748875.861
	6/10/2004	3792984.249	779724.657
	6/15/2004	3792934.975	780454.118
CZR5012	2/28/2004	3793646.588	778671.084
	4/1/2004	3806362.381	756511.956
CZR5015	3/8/2004	3793081.831	779021.335
	3/11/2004	3792701.918	780434.419
	3/15/2004	3792885.302	780222.952
	3/18/2004	3792868.141	780233.931
	3/22/2004	3792688.643	780429.241
	3/25/2004	3791785.448	780958.126
	4/6/2004	3792905.730	780193.618
	4/15/2004	3809848.135	749280.896
	4/19/2004	3809726.574	750682.170
	6/22/2004	3856034.400	699189.453
CZR5016	2/24/2004	3809732.691	752120.432
	2/28/2004	3809728.559	752178.655



## Appendix D. (continued)

Tag #	Date	Northing	Easting
	3/3/2004	3809721.659	752158.380
	3/5/2004	3809766.415	752110.571
	3/11/2004	3809347.950	751037.317
	3/15/2004	3808966.333	752948.408
	3/18/2004	3808959.820	752940.245
	3/22/2004	3809717.696	752206.796
	3/25/2004	3809000.791	752993.482
	3/29/2004	3808966.907	752941.950
	4/1/2004	3806362.381	756511.956
	4/19/2004	3809844.498	749343.990
	4/22/2004	3809009.286	752509.707
	4/26/2004	3809186.766	752457.212
	4/29/2004	3809723.348	752065.574
	5/13/2004	3809975.455	748877.345
	5/17/2004	3809634.799	752197.301
	5/20/2004	3804590.724	758230.333
	6/15/2004	3796100.115	780662.710
CZR5017	4/26/2004	3809758.561	752133.054
CZR5018	3/11/2004	3792069.575	780844.641
CZR5019	3/11/2004	3792069.575	780844.641
	3/15/2004	3792085.123	780805.542
	3/18/2004	3792048.859	780793.018
	3/22/2004	3792135.103	780786.840
	3/25/2004	3791690.813	780736.811
	4/1/2004	3792041.604	780795.593
	6/15/2004	3795989.235	780664.220
CZR5023	2/24/2004	3810176.517	749772.006
	2/28/2004	3810175.513	749744.126
	3/3/2004	3810185.953	749719.443
	3/5/2004	3810187.672	749732.422
	3/11/2004	3810195.541	749743.479
	3/15/2004	3809741.290	750680.085
	3/22/2004	3809306.471	752365.805
	3/25/2004	3809312.901	752373.122
	4/6/2004	3809933.486	749429.257
	4/12/2004	3809530.984	752297.154
	4/15/2004	3810113.352	750041.791
	4/19/2004	3806373.313	756417.613
CZR5026	4/8/2004	3807072.908	754106.128
	4/12/2004	3810054.753	749552.736
	4/15/2004	3810113.352	750041.791
	5/4/2004	3807312.043	754860.986
	6/15/2004	3792934.975	780454.118



Appendix D. (continued)

Tag #	Date	Northing	Easting
CZR5029	4/6/2004	3793592.406	778706.801
	4/8/2004	3793859.407	778480.963
	5/4/2004	3792724.788	780410.241
	6/15/2004	3796100.115	780662.710
CZR5118	2/28/2004	3792952.085	779219.848
	3/3/2004	3792750.780	780411.328
	3/5/2004	3792915.290	780320.109
	3/11/2004	3794729.401	777595.961
	3/18/2004	3792868.141	780233.931
	3/29/2004	3794978.494	778179.624
	4/1/2004	3806873.065	754431.662
CZR5122	2/13/2004	3792826.634	780456.081
	3/15/2004	3792085.123	780805.542
	5/24/2004	3791389.624	780651.280
	5/27/2004	3791432.668	780883.527
	6/1/2004	3791398.066	780636.398
	6/3/2004	3791405.812	780638.871
	6/10/2004	3791399.617	780640.545
	6/14/2004	3791547.249	780919.697
CZR5123	2/13/2004	3792826.634	780456.081
CZR5124	2/13/2004	3792826.634	780456.081
	3/29/2004	3792825.858	780452.282
	4/8/2004	3804782.098	768058.729
	4/12/2004	3810061.358	749562.690
	6/22/2004	3934169.368	682663.568
CZR5125	2/13/2004	3792826.634	780456.081
	2/28/2004	3793646.588	778671.084
CZR5126	2/13/2004	3792826.634	780456.081
	3/15/2004	3792693.682	780428.312
	3/25/2004	3792437.719	780661.377
	4/19/2004	3809773.012	752062.639
	4/22/2004	3809542.188	751777.326
	4/29/2004	3807129.616	754148.763
	5/17/2004	3792850.623	780390.994
	5/20/2004	3792851.209	780444.155
	6/15/2004	3792878.512	780465.637
CZR5127	2/13/2004	3793984.512	778932.285
	2/24/2004	3792933.402	779197.168
	3/5/2004	3793049.953	779040.484
	3/8/2004	3793732.394	778509.828
	3/11/2004	3793093.838	779134.236
	3/15/2004	3793003.030	779456.522



Appendix D. (continued)

Tag #	Date	Northing	Easting
	3/18/2004	3793051.858	779041.440
	3/22/2004	3792688.643	780429.241
	3/29/2004	3792825.858	780452.282
	4/1/2004	3792973.834	780141.117
	4/6/2004	3792905.730	780193.618
	4/8/2004	3793011.187	780057.948
	4/15/2004	3791738.764	780754.242
	6/16/2004	3785839.522	780437.054
CZR5128	2/13/2004	3792826.634	780456.081
	4/26/2004	3791419.151	780724.605
	4/29/2004	3791678.388	780738.333
	5/4/2004	3791611.362	780930.421
	5/10/2004	3791594.987	780899.202
	5/17/2004	3792130.700	780783.629
	5/20/2004	3791354.725	780858.381
	5/24/2004	3792839.160	780411.144
CZR5129	5/27/2004	3792711.273	780423.969
	2/13/2004	3792826.634	780456.081
	3/29/2004	3793041.172	780026.378
	4/1/2004	3792973.834	780141.117
	4/6/2004	3792905.730	780193.618
	4/8/2004	3792828.714	780422.008
	4/15/2004	3792911.772	780179.690
	4/19/2004	3792832.090	780268.835
	5/27/2004	3792849.524	780467.097
	6/7/2004	3792900.896	780469.440
	6/10/2004	3792872.214	780465.013
	6/15/2004	3792878.512	780465.637
CZR5130	2/13/2004	3792826.634	780456.081
	2/24/2004	3792914.755	779595.351
	2/28/2004	3793646.588	778671.084
	3/11/2004	3792797.778	780334.461
	3/18/2004	3792868.141	780233.931
	3/22/2004	3792688.643	780429.241
	3/25/2004	3792560.382	780562.278
	3/29/2004	3792825.858	780452.282
	4/1/2004	3792715.209	780421.230
	4/6/2004	3792905.730	780193.618
	4/8/2004	3793011.187	780057.948
	4/15/2004	3792911.772	780179.690
	4/19/2004	3792832.090	780268.835
	4/26/2004	3792846.829	780458.319
	4/29/2004	3793101.860	780151.503
	5/13/2004	3792842.016	780416.724
	5/17/2004	3792458.940	780650.999
	5/20/2004	3792853.928	780440.726



Appendix D. (continued)

Tag #	Date	Northing	Easting
	5/24/2004	3792839.160	780411.144
	5/27/2004	3792847.117	780405.659
	6/7/2004	3792900.896	780469.440
	6/10/2004	3792872.214	780465.013
	6/15/2004	3792878.512	780465.637
CZR5201	2/16/2004	3792766.752	777835.323
	3/25/2004	3809879.837	748990.089
CZR5202	2/16/2004	3793669.509	778670.323
	3/11/2004	3793017.951	779771.829
	3/29/2004	3793041.172	780026.378
	4/15/2004	3810166.244	750588.750
	4/19/2004	3810128.454	750531.859
	4/19/2004	3807241.706	754857.634
	6/15/2004	3796100.115	780662.710
CZR5203	2/16/2004	3792766.752	777835.323
	3/3/2004	3798492.549	774517.135
	3/29/2004	3794936.614	778068.440
	4/6/2004	3793910.405	778459.499
	4/8/2004	3793859.407	778480.963
	4/12/2004	3798112.406	774674.272
	4/19/2004	3803444.340	768707.010
	4/22/2004	3810088.563	750536.865
	4/26/2004	3806653.337	755459.627
	4/29/2004	3806930.235	754537.025
	5/6/2004	3804955.070	756775.777
	5/13/2004	3804800.301	757061.997
	5/17/2004	3805037.376	756732.166
	5/20/2004	3804999.855	756785.545
	5/24/2004	3805157.057	756607.284
	5/27/2004	3805008.962	756777.132
	6/1/2004	3804964.584	756752.887
	6/7/2004	3805001.661	756785.160
	6/10/2004	3805001.872	756791.532
	6/14/2004	3804973.457	756731.673
CZR5204	2/16/2004	3792766.752	777835.323
CZR5205	2/16/2004	3792766.752	777835.323
	4/6/2004	3809933.486	749429.257
	4/15/2004	3796866.269	776793.564
CZR5206	2/18/2004	3792082.434	779124.457
	5/4/2004	3796781.396	776740.467
	5/6/2004	3796892.223	776918.817
	5/20/2004	3796891.957	776817.254
	5/24/2004	3796852.915	776711.903



Appendix D. (continued)

Tag #	Date	Northing	Easting
	5/27/2004	3796877.366	776783.268
	6/7/2004	3796886.814	776818.426
	6/10/2004	3796887.830	776821.805
	6/14/2004	3796862.686	776777.654
CZR5207	2/18/2004	3792082.434	779124.457
	4/22/2004	3793051.942	779868.740
	5/10/2004	3791471.198	780849.151
	5/13/2004	3791509.376	780897.670
	5/17/2004	3808726.148	753207.822
	5/20/2004	3805691.108	756436.459
	5/27/2004	3805747.416	756434.112
CZR5208	2/16/2004	3792766.752	777835.323
	2/24/2004	3791599.683	780941.639
	3/3/2004	3793196.316	779042.576
	3/11/2004	3793839.320	778587.431
	3/18/2004	3792868.141	780233.931
	3/25/2004	3792602.952	780753.111
	3/29/2004	3791598.035	780937.727
	4/1/2004	3792875.309	780242.190
	4/6/2004	3792853.878	780395.605
	4/8/2004	3792980.996	779719.659
	4/19/2004	3792823.516	780424.731
	4/22/2004	3794066.448	778452.857
	4/26/2004	3791490.689	780881.013
	4/29/2004	3791781.962	780757.597
	5/6/2004	3794759.672	777674.150
	5/20/2004	3791380.174	780842.309
	5/24/2004	3791370.733	780841.349
	5/27/2004	3791507.506	780909.337
	6/1/2004	3791244.640	780832.546
CZR5209	2/16/2004	3793669.509	778670.323
	2/24/2004	3793874.251	778586.087
	3/3/2004	3793053.450	779901.102
	3/5/2004	3792901.801	780203.425
	3/18/2004	3792868.141	780233.931
	3/22/2004	3792869.471	780237.916
	3/29/2004	3793041.172	780026.378
	4/1/2004	3793042.248	780023.447
	4/8/2004	3809713.705	752180.148
CZR5210	2/16/2004	3792766.752	777835.323
	3/8/2004	3792994.856	780122.041
	3/18/2004	3810115.986	749658.392
	3/25/2004	3810072.854	750133.949
	3/29/2004	3810113.102	750039.763
	4/8/2004	3810058.330	750106.951



Appendix D. (continued)

Tag #	Date	Northing	Easting
	6/22/2004	3856034.400	699189.453
CZR5211	2/18/2004	3791383.323	780877.264
	3/29/2004	3792697.078	780426.943
	4/22/2004	3808187.052	753248.758
CZR5212	2/16/2004	3792766.752	777835.323
	4/19/2004	3803090.846	771090.716
CZR5213	2/20/2004	3794360.454	778274.551
	2/24/2004	3793489.252	778775.013
	3/3/2004	3793906.092	778576.093
	3/5/2004	3793936.493	778575.414
	3/8/2004	3803204.795	771504.159
	3/11/2004	3808973.754	752955.611
	3/15/2004	3809379.055	752384.690
	3/18/2004	3809419.353	752380.607
	4/19/2004	3795182.812	777181.051
	4/22/2004	3805662.719	765500.597
	5/17/2004	3792039.930	780796.659
	6/23/2004	3834283.611	723457.434
CZR5214	2/16/2004	3792766.752	777835.323
	4/1/2004	3798332.192	774692.461
	4/12/2004	3809814.913	749222.304
	6/23/2004	3831901.853	725174.903
CZR5215	2/20/2004	3795067.744	777758.252
	2/24/2004	3792933.402	779197.168
	3/8/2004	3793081.831	779021.335
	3/15/2004	3792693.682	780428.312
	3/18/2004	3792684.630	780434.790
	3/22/2004	3792688.643	780429.241
	4/1/2004	3794750.420	777549.735
	4/6/2004	3793592.406	778706.801
	4/8/2004	3793859.407	778480.963
	5/24/2004	3795851.768	777392.291
	6/10/2004	3792903.710	780463.415
CZR5216	3/2/2004	3793669.509	778670.543
	3/11/2004	3792984.163	779727.781
	3/15/2004	3792693.682	780428.312
	4/1/2004	3792041.604	780795.593
	4/8/2004	3792039.117	780801.202
	4/15/2004	3792023.644	780803.833
	4/22/2004	3792059.750	780796.760
	4/26/2004	3792237.679	780903.510
	4/29/2004	3791949.937	780805.586
	5/4/2004	3792318.669	780876.378



Appendix D. (continued)

Tag #	Date	Northing	Easting
	5/6/2004	3792087.196	780796.056
	5/17/2004	3792169.119	780921.132
	5/24/2004	3792124.874	780790.531
	5/27/2004	3792943.487	779668.425
	6/1/2004	3792863.228	780249.369
	6/7/2004	3810077.561	750515.216
CZR5217	2/16/2004	3792766.752	777835.323
	3/3/2004	3793196.316	779042.576
	4/12/2004	3802340.322	773674.346
	6/15/2004	3792934.975	780454.118
CZR5218	2/16/2004	3792766.752	777835.323
	4/6/2004	3809989.524	749468.410
	6/10/2004	3792844.562	780411.928
CZR5219	2/16/2004	3793669.509	778670.323
	2/24/2004	3793059.391	779904.462
	2/28/2004	3793043.116	779871.190
	3/3/2004	3793006.253	780089.582
	3/5/2004	3793056.105	779901.390
	3/8/2004	3793057.550	779891.415
	3/11/2004	3792984.163	779727.781
	3/15/2004	3793003.030	779456.522
	4/8/2004	3810189.097	749714.318
CZR5220	2/18/2004	3792082.434	779124.457
	4/15/2004	3810188.181	749774.249
	4/19/2004	3807505.672	754125.223
	4/22/2004	3809679.084	751968.282
	4/26/2004	3810014.547	750225.761
	4/29/2004	3801510.801	773564.242
	5/24/2004	3793039.124	779841.127
	6/1/2004	3792863.228	780249.369
	6/3/2004	3792859.950	780242.001
	6/7/2004	3792864.410	780232.045
	6/14/2004	3792996.277	780111.743
CZR5221	3/2/2004	3792766.739	777835.324
	3/25/2004	3792965.943	779165.360
	3/29/2004	3792870.585	780243.392
	6/15/2004	3795989.235	780664.220
CZR5222	2/18/2004	3792082.434	779124.457
	2/28/2004	3792675.673	780474.935
	5/13/2004	3794389.018	778398.452
	6/14/2004	3791924.325	780799.586
CZR5223	2/20/2004	3794360.454	778274.551



Appendix D. (continued)

Tag #	Date	Northing	Easting
	3/22/2004	3810103.835	750046.188
	5/27/2004	3792479.205	780813.790
CZR5224	2/18/2004	3791383.323	780877.264
	2/24/2004	3791599.683	780941.639
	2/28/2004	3791620.658	780918.968
	3/3/2004	3791581.777	780923.291
	3/5/2004	3791569.836	780926.055
	3/8/2004	3791759.193	780762.064
	3/11/2004	3793839.320	778587.431
	3/15/2004	3792085.123	780805.542
	3/18/2004	3792048.859	780793.018
	3/25/2004	3791690.813	780736.811
	4/8/2004	3809830.859	749329.365
	4/19/2004	3791693.392	780939.082
	4/22/2004	3791595.964	780926.604
	4/29/2004	3791781.962	780757.597
	5/4/2004	3791611.362	780930.421
	5/6/2004	3791610.859	780883.400
	5/10/2004	3792268.374	780863.200
	5/13/2004	3791580.782	780930.305
	5/17/2004	3791869.570	780785.124
	5/20/2004	3791721.702	780952.447
	5/24/2004	3791925.741	780954.109
	5/27/2004	3791499.287	780642.797
	6/1/2004	3791824.186	780777.741
	6/3/2004	3791898.662	780825.804
	6/7/2004	3791681.528	780942.764
	6/10/2004	3791575.665	780935.252
	6/14/2004	3791393.486	780642.754
CZR5225	2/18/2004	3792082.434	779124.457
CZR5226	2/18/2004	3792082.434	779124.457
	4/6/2004	3798548.907	774698.606
	6/10/2004	3793315.925	778939.336
CZR5227	3/2/2004	3792766.739	777835.324
	4/29/2004	3807236.917	754159.478
CZR5228	2/20/2004	3794360.454	778274.551
CZR5229	2/18/2004	3791383.323	780877.264
	3/3/2004	3793901.357	778466.795
	3/8/2004	3794974.942	777864.253
	5/17/2004	3807971.602	753465.661
	5/20/2004	3806408.911	756454.009
CZR5230	2/20/2004	3794360.454	778274.551



Appendix D. (continued)

Tag #	Date	Northing	Easting
	2/24/2004	3792933.402	779197.168
	2/28/2004	3792952.085	779219.848
	4/6/2004	3792905.730	780193.618
	6/22/2004	3834182.500	721861.244
CZR5231	2/20/2004	3795067.744	777758.252
	2/24/2004	3793489.252	778775.013
	3/8/2004	3793962.686	778571.479
	3/11/2004	3794122.175	778513.835
	3/18/2004	3792684.630	780434.790
	3/25/2004	3792848.499	780245.399
	3/29/2004	3792697.078	780426.943
	4/1/2004	3792715.209	780421.230
	4/12/2004	3810128.159	749890.367
	4/15/2004	3810057.431	750297.996
CZR5232	3/2/2004	3792766.739	777835.324
	3/11/2004	3794122.175	778513.835
CZR5233	3/2/2004	3793669.509	778670.543
	3/3/2004	3793579.458	778715.842
	3/5/2004	3793915.217	778574.895
	3/18/2004	3794020.556	778458.880
	5/20/2004	3794164.161	778385.513
	6/14/2004	3794027.963	778539.216
CZR5234	3/2/2004	3793669.509	778670.543
	3/3/2004	3793579.458	778715.842
	3/5/2004	3792901.801	780203.425
	3/11/2004	3792797.778	780334.461
	3/22/2004	3792869.471	780237.916
	3/29/2004	3793041.172	780026.378
	4/6/2004	3792853.878	780395.605
	4/8/2004	3793011.187	780057.948
	4/15/2004	3792864.261	780233.518
	6/15/2004	3795155.628	780805.504
CZR5235	3/2/2004	3792766.739	777835.324
	4/19/2004	3806574.418	764715.998
	4/22/2004	3808844.430	752485.011
	4/26/2004	3809203.993	752394.845
	5/27/2004	3809072.693	752993.182
CZR5236	3/2/2004	3792766.739	777835.324
CZR5237	3/2/2004	3793669.509	778670.543
	3/5/2004	3794931.893	778063.554
	3/11/2004	3794122.175	778513.835
	3/25/2004	3792888.779	780349.539



Appendix D. (continued)

Tag #	Date	Northing	Easting
	3/29/2004	3792697.078	780426.943
	4/6/2004	3796370.506	776069.938
	4/8/2004	3793224.586	779026.736
	4/12/2004	3806245.637	756588.724
	6/22/2004	3929947.803	685462.194
CZR5238	3/2/2004	3793669.509	778670.543
	3/3/2004	3794957.429	777852.657
	6/16/2004	3789011.310	780162.783
CZR5239	2/20/2004	3794360.454	778274.551
	3/25/2004	3792848.499	780245.399
CZR5240	2/20/2004	3794360.454	778274.551
	3/3/2004	3793196.316	779042.576
	3/11/2004	3793128.066	778988.266
	4/1/2004	3792715.209	780421.230
	4/12/2004	3809807.781	749248.886
	4/15/2004	3805805.803	761510.074
	6/3/2004	3805242.085	761228.844
	6/15/2004	3794142.646	780896.266
CZR5241	4/5/2004	3809976.741	748886.201
	4/6/2004	3810103.530	750733.962
	4/8/2004	3808726.911	752590.785
	4/12/2004	3809505.032	750801.411
	4/26/2004	3809921.079	748920.465
	5/13/2004	3805223.977	761189.247
	5/24/2004	3805193.093	761231.167
	5/27/2004	3805240.052	761253.434
	6/1/2004	3805259.949	761278.483
	6/7/2004	3805243.198	761234.138
	6/10/2004	3805246.585	761242.505
	6/14/2004	3805239.262	761247.603
CZR5242	4/6/2004	3809893.856	750769.005
CZR5243	4/5/2004	3809930.806	749431.036
	4/6/2004	3809643.911	751921.842
	4/22/2004	3808746.076	752766.961
	4/26/2004	3808807.553	752807.387
	5/13/2004	3808741.224	752587.924
	5/20/2004	3808907.061	752905.143
	5/27/2004	3808803.455	752756.556
	6/1/2004	3808796.301	752742.890
	6/3/2004	3808782.207	752717.489
	6/7/2004	3808727.483	752729.458
	6/14/2004	3808789.135	752738.745



Appendix D. (continued)

<b>Tag #</b>	<b>Date</b>	<b>Northing</b>	<b>Easting</b>
CZR5244	4/5/2004	3809881.741	749393.381
	4/8/2004	3805228.564	761239.760
CZR5245	3/30/2004	3809887.425	749398.468
	4/1/2004	3807829.677	753733.119
CZR5246	4/5/2004	3809930.806	749431.036
	4/8/2004	3810166.033	749912.350
CZR5247	3/30/2004	3809830.584	749260.491
CZR5248	4/5/2004	3809930.806	749431.036
	4/26/2004	3809860.181	749010.957
	5/24/2004	3801461.832	774241.804
	6/7/2004	3801387.138	774213.577
	6/10/2004	3801431.297	774256.699
CZR5249	3/30/2004	3809887.425	749398.468
	4/1/2004	3809699.923	752124.389
	4/12/2004	3810063.651	750321.145
	4/15/2004	3810099.559	750732.793
	4/19/2004	3809884.366	749356.240
	4/26/2004	3809921.079	748920.465
	4/29/2004	3809803.421	749241.183
	5/10/2004	3809770.716	752070.207
	5/27/2004	3809680.602	752170.095
	6/3/2004	3809570.089	752251.548
	6/10/2004	3809648.063	752189.876
	6/14/2004	3809653.792	752194.576
CZR5250	4/6/2004	3809893.856	750769.005
	5/24/2004	3809397.516	751486.440
	6/14/2004	3794780.176	777415.061
CZR5251	4/5/2004	3809976.741	748886.201
	4/6/2004	3809762.720	750724.453
	4/8/2004	3807081.495	754114.601
	4/15/2004	3809848.135	749280.896
CZR5252	3/17/2004	3809819.525	750706.173
	3/29/2004	3809618.743	750726.359
	5/4/2004	3803310.195	770217.436
CZR5253	3/30/2004	3809830.584	749260.491
	4/6/2004	3809820.997	750726.593
	4/8/2004	3809769.782	750673.392
	4/12/2004	3806716.956	755448.059
	4/15/2004	3807002.057	754966.542
	4/22/2004	3807984.928	753498.221



Appendix D. (continued)

Tag #	Date	Northing	Easting
	4/26/2004	3807994.055	753468.213
	4/29/2004	3806850.901	754322.684
	5/13/2004	3807016.142	754148.690
	5/17/2004	3806906.145	754171.849
	5/20/2004	3806859.926	754244.507
	5/27/2004	3806871.461	754212.864
	6/1/2004	3806852.965	754374.777
	6/3/2004	3806880.485	754196.325
	6/7/2004	3806935.693	754140.360
	6/10/2004	3806904.180	754160.678
	6/14/2004	3806865.260	754287.247
CZR5254	4/5/2004	3809881.741	749393.381
CZR5255	3/30/2004	3810154.417	749890.764
	4/6/2004	3810150.413	749883.301
	4/8/2004	3810035.901	750155.944
	4/12/2004	3810128.159	749890.367
	4/19/2004	3810155.227	749909.573
	5/10/2004	3810114.485	749915.469
	5/24/2004	3810116.309	749911.002
	5/27/2004	3810121.675	749894.851
	6/1/2004	3810102.493	749925.725
	6/3/2004	3810161.477	749934.787
	6/10/2004	3810113.899	749906.232
	6/14/2004	3810120.756	749895.067
CZR5256	3/30/2004	3809830.584	749260.491
	4/6/2004	3810087.120	750748.432
	4/8/2004	3809826.988	749079.101
	4/12/2004	3810129.250	750642.438
	4/19/2004	3810117.056	750719.362
	4/29/2004	3809861.073	748942.824
CZR5257	3/30/2004	3809887.425	749398.468
	4/1/2004	3809879.343	749357.735
	4/19/2004	3809880.750	749410.012
	4/26/2004	3809906.894	749435.476
	4/29/2004	3809797.026	749236.497
	5/24/2004	3809870.601	749400.883
	5/27/2004	3809885.680	749361.746
	6/3/2004	3809879.303	749375.087
CZR5258	4/5/2004	3809930.806	749431.036
	4/8/2004	3809769.782	750673.392
CZR5259	3/30/2004	3810075.788	749573.073
	4/1/2004	3809684.602	751910.085
	4/6/2004	3810150.413	749883.301



## Appendix D. (continued)

Tag #	Date	Northing	Easting
CZR5260	4/5/2004	3809823.645	749137.429
	4/6/2004	3801417.137	773556.442
	4/19/2004	3797573.069	776469.734
CZR5261	3/30/2004	3809830.584	749260.491
	4/1/2004	3809621.653	752218.465
	4/8/2004	3810101.800	750731.124
	4/15/2004	3809338.542	751074.353
	4/29/2004	3809697.391	751986.259
	5/6/2004	3809836.542	749204.501
	5/10/2004	3809805.030	749295.908
CZR5262	3/30/2004	3810154.417	749890.764
	4/1/2004	3809373.490	750989.047
	4/6/2004	3809749.386	750670.956
	4/8/2004	3809702.903	752123.344
	4/12/2004	3809842.013	750706.117
	4/15/2004	3809402.829	750959.439
	4/19/2004	3807061.927	754557.540
	4/22/2004	3808868.584	752864.079
	4/26/2004	3808584.793	753305.979
CZR5263	4/29/2004	3808529.509	753276.145
	3/30/2004	3809887.425	749398.468
	4/1/2004	3808507.786	753254.723
CZR5264	4/8/2004	3809702.903	752123.344
	3/30/2004	3809829.232	749196.152
CZR5265	3/30/2004	3810075.788	749573.073
	4/6/2004	3808925.919	753182.019
	4/26/2004	3809567.132	751856.324
	5/10/2004	3809837.698	749219.199
CZR5266	3/24/2004	3809839.905	749278.521
	3/29/2004	3809950.568	750762.225
	4/6/2004	3809821.215	749094.116
CZR5267	3/30/2004	3809830.584	749260.491
	4/1/2004	3808938.505	752915.202
CZR5268	3/30/2004	3809829.232	749196.152
	4/1/2004	3810058.995	750186.189
	4/8/2004	3809826.988	749079.101
	4/19/2004	3810155.227	749909.573
	4/22/2004	3810105.195	749931.555
	4/26/2004	3809798.769	749149.296
	4/29/2004	3810068.586	750064.558



## Appendix D. (continued)

Tag #	Date	Northing	Easting
	5/10/2004	3810072.721	750352.409
	5/17/2004	3810070.119	750767.439
	5/24/2004	3810094.504	750744.341
	5/27/2004	3810121.257	750703.024
	6/1/2004	3810107.096	750735.245
	6/3/2004	3810104.836	750726.057
	6/14/2004	3810077.147	750737.114
CZR5269	3/30/2004	3809887.425	749398.468
CZR5270	3/30/2004	3810075.788	749573.073
	4/1/2004	3809670.519	750686.477
	4/6/2004	3809199.986	752398.990
	4/8/2004	3808764.297	753199.030
	4/12/2004	3809007.281	753124.370
	4/15/2004	3808936.309	752893.863
	4/22/2004	3809030.516	753107.548
CZR5271	3/30/2004	3809830.584	749260.491
	4/8/2004	3809319.729	751066.604
	4/19/2004	3809324.727	751043.226
	6/1/2004	3809330.058	751092.405
	6/3/2004	3809346.735	751084.015
CZR5272	4/5/2004	3809881.741	749393.381
	4/6/2004	3809568.973	750740.944
CZR5273	3/30/2004	3809829.232	749196.152
	4/1/2004	3806377.635	764005.198
	4/6/2004	3808985.379	752485.109
	4/12/2004	3810091.975	749600.369
	4/15/2004	3806874.621	754262.760
	4/22/2004	3809817.065	749293.413
	4/29/2004	3809797.026	749236.497
	6/23/2004	3829406.406	729474.402
CZR5274	3/30/2004	3810154.417	749890.764
CZR5275	3/30/2004	3810154.417	749890.764
	4/1/2004	3809572.205	750819.992
CZR5276	3/17/2004	3809752.737	750686.856
	3/18/2004	3809839.905	750756.634
CZR5277	4/5/2004	3809976.741	748886.201
	4/6/2004	3805117.213	760315.044
	4/8/2004	3803580.617	768745.331
CZR5278	3/24/2004	3809839.905	749278.521



## Appendix D. (continued)

Tag #	Date	Northing	Easting
	3/25/2004	3807458.006	754837.554
CZR5279	3/30/2004	3810154.417	749890.764
	4/6/2004	3810038.822	750348.255
	4/12/2004	3809807.781	749248.886
	4/19/2004	3809338.114	751496.427
CZR5280	4/5/2004	3809881.741	749393.381
	4/15/2004	3806358.446	762157.146
	4/26/2004	3809944.014	749464.954
	4/29/2004	3809913.891	749422.063
CZR5281	4/5/2004	3809930.806	749431.036
	4/6/2004	3807699.018	753976.562
CZR5282	4/5/2004	3809881.741	749393.381
	4/6/2004	3809504.449	750797.855
	4/8/2004	3809437.374	750880.095
	4/12/2004	3809813.314	749286.066
CZR5283	4/6/2004	3809893.856	750769.005
	4/12/2004	3809309.100	751005.652
	5/20/2004	3806353.993	763837.089
CZR5284	4/5/2004	3809823.645	749137.429
	4/6/2004	3810018.405	750190.476
	4/8/2004	3807177.101	754611.524
	4/12/2004	3809241.039	752434.740
	4/15/2004	3810128.389	749685.907
	4/19/2004	3809701.481	752119.355
	4/22/2004	3809308.654	751303.150
	5/4/2004	3809491.021	750812.547
CZR5285	4/5/2004	3809881.741	749393.381
	4/6/2004	3807699.018	753976.562
	4/12/2004	3810172.997	749823.221
	4/15/2004	3809456.901	751723.093
	4/26/2004	3809308.366	751348.470
	5/24/2004	3809572.230	750741.344
	6/1/2004	3809583.578	750734.131
	6/3/2004	3809578.145	750814.266
CZR5286	3/30/2004	3809887.425	749398.468
CZR5287	3/30/2004	3809829.232	749196.152
	4/6/2004	3809813.480	749080.101
	4/8/2004	3810049.073	750124.746
	4/12/2004	3810097.595	750551.188



Appendix D. (concluded)

Tag #	Date	Northing	Easting
CZR5288	3/30/2004	3809829.232	749196.152
	4/1/2004	3810187.185	749725.251
	4/8/2004	3810193.191	749733.142
	4/12/2004	3810180.297	749801.093
	4/19/2004	3810140.182	749753.406
	5/20/2004	3810140.832	749818.460
	6/7/2004	3810138.728	749811.846
	6/10/2004	3810143.557	749794.554
CZR5289	4/5/2004	3809930.806	749431.036
	4/6/2004	3807405.995	754704.258
	4/8/2004	3809437.374	750880.095
CZR5290	3/30/2004	3809829.232	749196.152



## **APPENDIX E**

### **SUMMARY OF AMERICAN SHAD BEHAVIOR FROM FISH TAGGED AND RELEASED AT LOCK AND DAM #1 DURING 2004**



Appendix E. Summary of American Shad behavior from fish tagged and released at Lock and Dam #1 during 2004.

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5241	04/05/2004	Shocked	No	Male shad tagged at L&D #1 fell back to the vicinity of the NC 11 station where it remained until 04/12/04. The fish swam downstream to a position a short distance upstream of the IP station. The shad remained in this vicinity until 04/19/04 and proceeded back upstream and passed the NC 11 station on 04/20/04. It retreated downstream again passing the NC 11 station on 04/28/04 at 15:00 and passed the IP station at 22:00 on the same day. This fish was manually tracked in the same location until 06/14/04 and is believed to represent a dead fish.
5242	04/06/2004	Gill Net	No	Female shad tagged at L&D #1 fell back after tagging and passed the NC 11 station on 04/06/04. This fish was registered on the IP station on 04/09/04 and back at the NC 11 station on 04/10/04. The fish remained in the vicinity of NC 11 until early morning of 04/13/04 when it moved downstream and was located by the IP station at 9:00 the same day. This fish swam back and forth between the NC 11 and IP fixed stations for the next 24 hours. This fish was not located again by either fixed stations or by manual tracking.
5243	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back to a location downstream of the NC 11 station where it was located on 04/06/04. The fish remained between IP and NC 11 until 04/10/04 when it traveled downstream and passed IP station on 04/11/04. This fish returned back upstream, passing the IP station on 04/15/04 to a location between IP and NC 11 where it remained for the rest of the study period. It is believed that this fish died at this location.
5244	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back passed NC 11 station on 04/05/04 and passed the IP station heading downstream on 04/08/04. The fish returned upstream and passed the IP station at 06:45 on the same day. This shad swam back downstream again and passed the IP station on 04/11/04 where it remained for several hours turning back up-stream again. The fish passed the NC 11 station on 04/15/04 and made back and forth passes by the station until 04/23/04, after which the fish was not located again.
5245	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back passed the NC 11 station on 30 March to a location between NC 11 and IP on 04/04/04. This fish passed the NC 11 station and remained just upstream of the station until the evening of 04/05/04. This fish was not located again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5246	04/05/2004	Gill Net	No	Female shad tagged at L&D #1 fell back to a location near the NC 11 bridge and was registered by the fixed station on 04/05/04 and 04/07/04. This fish moved back upstream to a location a short distance downstream of L&D #1 where it was manually tracked on 04/08/04 after which this fish was not located again.
5247	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back downstream after tagging and passed the NC 11 fixed station on 04/02/04. This fish remained between NC 11 and IP until 04/09/04 when it was recaptured in a commercial set net upstream from IP.
5248	04/05/2004	Gill Net	No	Female shad tagged at L&D #1 fell back downstream past the NC 11 station on 04/05/04 and arrived at the IP station on 04/06/04 at 21:00 where it remained in the near vicinity of the IP station until 23:00 on 04/07/04. After this, the fish made two quick runs up to a location just downstream from the NC 11 station on 04/22/04 and 04/26/04 and was manually tracked near L&D #1 later that afternoon on 04/26/04. It fell back by the NC 11 and IP station on 04/27/04. This fish was manually tracked three more times downstream of IP. After this, the fish was not located again.
5249	04/30/2004	Gill Net	Yes	Female shad tagged near L&D #1 fell back to a location just upstream from the NC 11 fixed station where it was registered on 03/30/04 at 11:45. The fish moved upstream and was registered on the L&D #1 fixed station on three separate occasions between 04/03/04 and 04/06/04 when it was passed upstream. This shad fell back again and was subsequently located downstream of L&D #1 on 04/12/04 during normal tracking efforts. This fish remained between NC 11 and L&D #1 until 04/15/04 when it was located by the NC 11 fixed station moving in a downstream direction. The fish remained in the vicinity of the NC 11 station until 04/19/04, after which it passed NC 11 moving downstream. The fish was manually tracked on multiple occasions at a location underneath the power lines approximately 3/4 mile downstream from the NC 11 bridge. It is believed that this fish died at this location.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5250	04/06/2004	Gill Net	No	Female shad tagged near L&D #1 fell back to the vicinity of the NC 11 fixed station where it remained until 04/13/04 when the fish disappeared. The fish was located again on 05/24/04 by the NC 11 fixed station and by manual tracking. The fish remained near NC 11 until 20:00 on 05/24/04, moved downstream and was located by the IP fixed station at 23:00 that same evening. The fish promptly turned back upstream and arrived back at the NC 11 station at 02:00 on 05/25/04. This fish was not found again until 06/14/04 where it was manually tracked near the Navassa train trestle.
5251	04/05/2004	Shocked	No	Male shad tagged at L&D #1 fell back to the NC 11 station and passed back and forth by the station twice between 04/06/04 and 04/07/04. During the early morning of 04/07/04, the fish moved downstream of the NC 11 bridge to location between IP and the NC 11 bridge where it was manually tracked on 04/08/04. The fish returned upstream and was registered on the NC 11 fixed station on 04/14/04 at 11:00. The fish remained near the NC 11 bridge until 13:00 passed upstream only to return again on 04/16/04 and 04/23/04 for brief periods. The fish was not registered again until 05/11/04 at the NC 11 fixed station at which time it was moving downstream. The fish was never located again after 05/12/04, when it passed the IP fixed monitor.
5252	03/17/04	Gill Net	No	Female shad tagged near L&D #1 fell back past NC 11 fixed station and remained undetected between NC 11 and IP until 03/26/04 when it was registered by the IP fixed station at 16:30 on 03/27/04 and by the NC 11 fixed station later that same evening. The fish remained in a location a short distance upstream of the NC 11 bridge until the morning of 04/01/04. The fish moved a short distance downstream of the fixed station until 00:30 on 04/02/04. This fish disappeared until 04/17/04 when it was briefly registered on the NC 11 fixed station. The fish was manually tracked near Hood Creek on 05/04/04 after which this fish was not located again.
5253	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 was registered only once by the NC 11 fixed station on 05/30/04. This fish was manually tracked many times between NC 11 and L&D #1 on 04/08/04. Shad 5253 was tracked many times at the same location between NC 11 and IP and is believed to have died at this location.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5254	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back downstream passed the NC 11 fixed station at 13:30 and passed the IP fixed station at 19:30. This fish was recaptured by a commercial drift-net fisherman near CP&L at approximately river mile 7 on 04/08/04.
5255	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 remained between L&D #1 and the NC 11 bridge. This shad was never registered on any fixed stations but was manually tracked frequently in the same general vicinity, and is believed to have died shortly after tagging.
5256	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back a short distance after tagging but never passed the NC 11 fixed station. It was located by the NC 11 station on 04/01/04 a short distance upstream and was manually tracked five times between the NC 11 bridge and L&D #1 until 04/29/04 after which this fish was not found again.
5257	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back a short distance after tagging to a location just upstream of the NC 11 fixed station where it was located on 04/02/04. This fish moved back upstream of the NC 11 bridge and was manually tracked a short distance downstream from L&D #1. This fish fell back again to a location near the NC 11 fixed station. This shad remained just downstream of the NC 11 fixed station for three days between 04/22/04 and 04/24/04. After 04/24/04, the fish proceeded back upstream to a location a short distance downstream from the L&D #1. This fish was manually tracked in the same location on multiple occasions and is believed to have died at this site.
5258	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back to a position a short distance upstream of the NC 11 fixed station where it remained until 04/09/04. This shad was not located again until 04/19/04 when it was picked up by the IP fixed station. The fish proceeded back upstream to a location just downstream of the NC 11 fixed station where it was registered on 04/22/04. The fish remained at this location until 06:00 on 04/23/04 and was not found again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5259	03/30/2004	Gill Net	Yes	Male shad tagged at L&D #1 fell back to a location near the NC 11 fixed station the morning of 03/31/04. The fish proceeded back upstream and was passed through the locking process at approximately 16:30 on 04/01/04. This shad appears to have proceeded upstream of L&D #1 until it returned to a location near the L&D #1 fixed station when it was registered at 20:00 on 04/01/04. This fish remained in the area until 23:30 and departed again until 4:00 on 04/02/04 where it was picked up again at the L&D #1 fixed station. It appears that at approximately 05:00, this shad swam over the dam and fell back downstream to a location near the NC 11 fixed station, arriving at 06:30 the same morning. This shad remained in the general vicinity of the NC 11 bridge until approximately 20:00 of 04/02/04. The fish was manually tracked between the NC11 bridge and L&D #1 on 04/06/04. After this the fish was not found again until 04/22/04 when it was registered by the NC 11 fixed station at 10:30. The fish passed, heading downstream, on 04/23/04 at 02:30 and was not located again.
5260	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 remained in the vicinity of its tagging location and appears to have entered the lock chamber but did not proceed upstream when the upstream doors were opened. The fish was registered by the NC 11 fixed station at 18:45 heading downstream. This shad passed the IP fixed station at 00:20 on 04/06/04. Manual tracking located this fish at 10:45 on 04/06/04 near Dollison's landing. Shad 5260 was manually tracked on 04/19/04 near the mouth of Indian Creek. After this, the fish was not found again for the remainder of the study period.
5261	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 that fell back to vicinity near the NC 11 fixed station where it remained until 04/29/04. Manual tracking confirmed this location during this time. This shad moved upstream to a position near L&D #1 where it was located on 05/06/04. The fish fell back passed the NC 11 station on 05/08/04 and arrived at the IP station on 05/09/04 at 01:30. The fish returned back upstream, passing the NC 11 fixed station at 10:20 on 05/10/04. Manual tracking located this fish near the dam again on 05/10/04. This fish turned downstream and passed the NC 11 station at 06:30 on 05/11/04 and the IP station at 08:10 the same day. This fish was not found again and is assumed to have left the study area.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5262	03/30/2004	Gill Net	No	Male shad tagged near L&D #1 fell back to a location a short distance upstream from the NC 11 fixed station on 03/31/04. This fish remained within close proximity of the bridge, passing back and forth by the monitor many times between 04/01/04 and 04/12/04. Manual tracking located this fish five times during this period in various locations upstream and downstream from the NC 11 station. On 04/17/04 this shad moved downstream and passed the NC 11 fixed station at 17:00. On 04/19/04, this fish was manually tracked near River Mile 33. Shad 5262 moved back upstream again and was located by the NC 11 fixed station at 05:30 on 04/21/04. This fish was manually tracked three more times between 04/22/04 and 04/29/04. After this, the fish was not found again for the remainder of the study.
5263	03/30/2004	Gill Net	No	Male shad tagged near L&D #1 fell back and was manually tracked near Weyman's Creek on 04/01/04. This fish moved upstream and was manually located downstream from the NC 11 bridge on 04/08/04. After this, the fish was not found again until 05/03/04 when it past the NC 11 fixed station moving downstream and this fish past the IP fixed station on 05/26/04 and was not located again.
5264	03/30/2004	Gill Net	Yes	Female shad tagged near L&D #1 fell back to the vicinity of the NC 11 fixed station and remained in the general area until 22:00 on 04/01/04. This fish proceeded downstream and was registered by the IP fixed station at 04:20 on 04/02/04. This shad stayed near the IP fixed station until 13:00 on 04/02/04 and returned back to the vicinity of the NC 11 bridge. This fish made two back and forth trips between the two stations between 04/03/04 and 04/06/04. On 04/07/04, the fish was located by the NC 11 fixed monitor and the fish remained in the area until the afternoon of 04/08/04. This shad was not located again until 04/13/04, when it was registered by the NC 11 monitor. The fish was located by the NC 11 station briefly three more times until 04/23/04 and was eventually passed upstream by the locking process. However, this fish was never registered by the L&D #1 fixed station. This fish successfully navigated the dam because it was recaptured by a recreational fisherman at L&D #2 on 04/26/04.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5265	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back downstream to a location near the NC 11 fixed station where it remained until 06:00 on 04/01/04. This fish moved downstream and was manually tracked on 04/06/04 between IP and NC 11. The fish was located by the IP fixed station on 04/14/04 at 04:00. This shad moved back upstream and passed the NC 11 fixed station on 04/15/04. This fish remained above the NC 11 station until 04/21/04 when it began to move back and forth by the NC 11 monitors until 05/03/04. It moved upstream of the NC 11 bridge and was manually tracked on 05/10/04 a short distance downstream of the dam. It fell back downstream, passing the NC 11 fixed station at 01:30 am on 05/11/04 and passing the IP fixed station at 04:45. After which, this fish was not found again.
5266	03/24/2004	Gill Net	No	Female shad tagged near L&D #1 fell back to a location a short distance upstream of the NC 11 fixed station where it remained until 03/29/04 when manual tracking located this fish near the mouth of Natmore Creek. Manual tracking located this fish a short distance downstream of L&D #1 on 04/06/04. After this date, this fish was not located again.
5267	03/30/2004	Gill Net	Yes	Female shad tagged at L&D #1 fell back downstream a short distance from the NC 11 fixed station. Shad 5267 was manually tracked near Weyman's Creek on 04/01/04. It moved further downstream out of range of the NC 11 fixed station but returned within range in the early morning hours of 04/06/04. The fish passed the NC 11 fixed station at 03:00 on 04/06/04 and passed through the locking process at L&D #1 at 18:30 on 04/07/04. After this, the fish was not found again.
5268	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 was never located by any of the fixed stations but was manually tracked 13 times between the NC 11 bridge and L&D #1. It is believed after 05/17/04 this fish died near the mouth of the Natmore Creek.
5269	03/30/2004	Gill Net	Yes	Female shad tagged near L&D #1 fell back and passed the NC 11 fixed station on 03/30/04. The fish was registered on the IP fixed monitor on 04/03/04 at 04:30 and turned back upstream at 05:30 on the same day. It arrived within range of the NC 11 station at 10:15 on 04/03/04 and remained in the general vicinity of the NC 11 bridge until 01:15 on 04/04/04. This fish was successfully locked upstream on 04/05/04, after which this fish was not located again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5270	03/30/2004	Gill Net	No	Female shad tagged at L&D #1 remained between L&D #1 and NC 11 as confirmed by manual tracking on 04/01/04. This fish moved downstream and passed the NC 11 fixed monitor on 04/03/04 at 13:45. Manual tracking on 04/06/04, 04/08/04, 04/12/04, and 04/15/04 located this fish between the NC 11 bridge and IP. At 18:00 on 04/15/04, this fish passed the NC 11 fixed station moving upstream. At 20:00 the fish passed the station again moving downstream. This shad remained between the NC 11 fixed station and IP station and within range of the NC 11 monitor off and on until 22:00 on 04/21/04. After this the fish was manually located on 04/22/04 a short distance downstream of the NC 11 fixed station. The fish was not found again after this.
5271	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back downstream after tagging to a location very close to the NC 11 station. The fish made several brief movements upstream but soon died at its original location a short distance upstream from the NC 11 bridge where it was continuously registered by the monitors until 06/29/04.
5272	04/05/2004	Gill Net	Yes	Female shad tagged near L&D #1 was located on 04/06/04, downstream of the NC 11 bridge. The fish was registered by the NC 11 fixed station on 04/07/04 until 18:45 when the fish passed the station moving downstream. It arrived at the IP fixed station at 04:20 on 04/09/04 and remained near the station until 06:00 when it moved back upstream again. On 04/10/04 the fish was registered by the NC 11 monitors and passed the station at 07:00. The fish was briefly picked up by the NC 11 station 5 more times between 04/13/04 and 04/26/04. The fish moved upstream and was successfully locked through at L&D #1 on 04/26/04. This shad proceeded upstream and was not found again until 05/25/04 when it was located by the L&D #1 station. The fish remained within close proximity of the L&D #1 monitor until 05/31/04 when it disappeared again. The fish is thought to have fallen back over the dam soon after 05/31/04 because it was located by the NC 11 station at 20:45 on 06/08/04. This fish was not located again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5273	03/30/2004	Gill Net	Yes	Male shad tagged near L&D #1 fell back and passed the NC 11 fixed station at 11:45 on 03/30/04. Manual tracking located this shad near the Lyon Thoroughfare on 04/01/04. This shad moved upstream and passed the IP station on 04/05/04 and was located on 04/06/04 between IP & NC 11 during a manual tracking effort. This shad was registered by the NC 11 fixed station on 04/07/04 and remain within range and downstream of the monitor until 04/10/04 when it moved upstream of the NC 11 bridge. Shad 5273 was manually tracked on 04/12/04 near L&D #1 and on 04/15/04 was found downstream from Weyman's Creek. This shad was registered by the IP fixed monitor on 04/15/04 for a brief period and was again back at the NC 11 bridge on 04/16/04. The fish was not found again until 04/22/04 when it was located a short distance downstream of the dam during a manual tracking effort. On 04/30/04, this fish was successfully locked upstream and was later located on 06/23/04 below L&D #2 during a manual tracking effort. <b><u>This is the only shad tracked above L&amp;D #1.</u></b>
5274	03/30/2004	Gill Net	No	Female shad tagged at L&D #1 fell back and passed the NC 11 fixed station at 03:00 on 04/01/04. This fish moved back upstream to a location downstream of the NC 11 station on the same day at 20:00. Shad 5274 moved upstream and passed the NC 11 bridge on 04/03/04 at 10:00. This fish fell back again and traveled downstream and passed the NC 11 fixed monitor on 04/04/04. This shad arrived at the IP fixed station at 05:00 on 04/05/04. It turned and swam upstream at 07:00 and arrived at the NC 11 bridge at 15:30 on 04/06/04. The fish remained in the vicinity of the NC 11 fixed station until 04:15 on 04/07/04 when it moved upstream towards the L&D #1. This fish was recaptured on 04/12/04 by a commercial drift net fisherman.
5275	03/30/2004	Gill Net	No	Female shad tagged at L&D #1 fell back to a position upstream of the NC 11 fixed station where it was registered on 04/01/04. Manual tracking on the same day confirmed this location. The fish was recaptured in a commercial set net on 04/02/04.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5276	03/17/2004	Gill Net	No	Female shad tagged near L&D #1 fell back and was manually tracked a short distance upstream from the NC 11 bridge on 03/18/04 and again by the NC 11 fixed station on 03/31/04. It moved upstream and out of range of the station and was not located again until 04/10/04 when it was once again registered upstream of the NC 11 bridge by the fixed station. This fish disappeared upstream again and returned to the upstream location at the NC 11 bridge on 04/16/04. After this date, the fish was not located again.
5277	04/05/2004	Shocked	No	Male shad tagged near L&D #1 fell back and passed the NC 11 fixed station at 14:30 on 04/05/04. This fish passed the IP fixed station at 07:00 on 04/06/04. Manual tracking located this fish downstream from IP on 04/06/04 at 12:00 and on 04/08/04 at 11:00 this shad was manually tracked near Hood Creek. This fish was not located again and is believed to have exited the study area.
5278	03/24/2004	Gill Net	Yes	Female shad tagged near L&D #1 fell back downstream and passed the NC 11 fixed station at 16:45 on 03/24/04. This shad passed the IP fixed monitor on 03/25/04 at 08:45. Shad 5278 moved back upstream and was manually tracked between IP and NC 11 on the afternoon of 03/25/04. The fish returned to a downstream location within range of the NC 11 station on 03/26/04 and passed the station, moving upstream at 01:45 on 03/27/04. This shad was located upstream from the NC 11 bridge by the fixed monitor three more times until 04/19/04. The fish was successfully locked upstream on 04/26/04 and was not located again.
5279	03/30/2004	Gill Net	Yes	Female shad tagged at L&D #1 fell back downstream and remained in the general vicinity of the NC 11 fixed monitor until 04/19/04. This fish made many movements back and forth by the station during this time. It moved upstream and out of range of the station once on 04/04/04 and was located between NC 11 and the dam on 04/06/04 and 04/12/04 during manual tracking efforts. After 04/19/04 this fish moved upstream again and was locked through sometime between 04/19/04 and 04/26/04. This fish was not picked up by the L&D #1 monitor until 04/26/04 when it was located by the outside hydrophone that points away from the lock chamber. This indicates that the fish passed by the inside hydrophone (lock chamber hydrophone) undetected but was located swimming in the pool above the dam during the early morning hours of 04/26/04. This fish fell back over the dam and was registered by the NC 11 fixed monitor later that morning on 04/26/04. After which the fish was not found again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5280	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back after tagging and passed the NC 11 fixed station at 15:00 on 04/05/04 to a location between IP and NC 11. This fish returned upstream and passed the NC 11 monitor at 16:45 on 04/07/04. This shad remained in the general vicinity of the NC 11 station until 06:00 on 04/15/04 when it fell back downstream and was registered by the IP fixed station. The fish passed the IP station at 10:20 and was manually tracked downstream from IP at 11:45. It returned upstream passing the IP station on 04/16/04 and passed the NC 11 station at 11:00 on the same day. This fish remained above the NC 11 station and was manually tracked between the NC 11 bridge and L&D #1 on 04/26/04 and 04/29/04. After this, the fish was not located again.
5281	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back after tagging and was registered by the IP fixed station at 17:00 on 04/05/04. The fish moved upstream and was registered at the NC 11 fixed station at 03:00 on 04/06/04. Manually tracking located this fish downstream of the NC 11 bridge on the same day at 13:45 near Narrow Gap on 04/06/04. This fish disappeared until 04/22/04 when it was located by the NC 11 fixed station at 02:15. The fish was located once more on 04/30/04 by the NC 11 monitor, after which, this fish was not found again.
5282	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back to a location upstream from the NC 11 fixed station where it remained for a brief period on 04/05/04. This fish moved back upstream and out of range of the NC 11 station until 05:00 on 04/06/04 when it was again registered on the NC 11 monitor. Manual tracking located this fish on 04/06/04 between NC 11 and L&D #1. The next two manual tracking efforts on 04/08/04 and 04/12/04 located this fish again between NC 11 and L&D #1. This fish was not located again until 04/19/04 when it was picked up by the IP fixed monitor at 23:00 moving upstream. Between 04/19/04 and 04/23/04, this shad traveled back and forth between IP and NC 11 four times, passing upstream of NC 11 at 00:30 on 04/23/04. This fish was successfully locked upstream at 14:00 on 04/26/04 where it remained in the vicinity of the fixed station at L&D #1 until 20:45 on the same day. This fish was not found again until 04/30/04 when it was located back at the NC 11 bridge. This shad passed the IP fixed station at 05:30 on 05/03/04 and was not located again.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5283	04/06/2004	Gill Net	No	Male shad tagged near the NC 11 bridge fell back and passed the NC 11 fixed monitor at 17:00 on 04/06/04. The fish passed the IP fixed station at 01:30 on 04/07/04 continuing downstream. Shad 5283 was manually located near the NC 11 bridge on 04/12/04. This fish disappeared until 04/16/04 when it was located near the NC 11 bridge by the fixed monitor. This shad moved back downstream again and passed the IP fixed station on 04/19/04. The fish returned upstream passing the IP fixed station on 04/22/04 and the NC 11 fixed station on 04/24/04. This fish was not found again until 05/20/04 when it was manually tracked near the Lyon Thoroughfare. After this, the fish was not found again.
5284	04/05/2004	Gill Net	No	Female shad tagged at L&D #1 fell back and passed the NC 11 station at 13:00 on 04/05/04. It returned within range of the downstream hydrophone at NC 11 on 04/06/04 and passed the station moving upstream at 04:15. This shad was picked up briefly by the NC 11 monitor on 04/07/04 and moved downstream between the NC 11 bridge and IP. Manual tracking on 04/08/04 confirmed the location of this fish on 04/07/04. Manual tracking on 04/12/04 located this fish near river mile 36. It returned upstream and passed the NC 11 fixed station on 04/14/04 at 05:15. Manual tracking on 04/15/04 located this fish a short distance downstream of L&D #1. This fish remained between the NC 11 bridge and L&D #1, showing up on the NC 11 fixed station periodically until 04/19/04 when it was manually located downstream from the NC 11 bridge. On 04/22/04, this fish was found near the NC 11 bridge both by the fixed station and by manual tracking. On 04/23/04, this fish moved back downstream again, passing the NC 11 fixed monitor on 04/23/04, and returned back to location between the NC 11 bridge and the dam on 04/30/04. Manual tracking found this fish within close proximity of the NC 11 bridge on 05/04/04 when it was picked up by the NC 11 fixed station moving in a downstream direction. It is believed that this fish left the study area.



## Appendix E. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5285	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back and passed the NC 11 fixed station on 04/05/04 at 14:15. This fish moved downstream to a location between IP and the NC 11 bridge where it was manually tracked on 04/06/04. This fish passed the IP fixed station at 21:45 on 04/08/04 and remained within range of the downstream hydrophone until 04/10/04. It moved back upstream and was picked up downstream of the NC 11 station on 04/11/04 at 22:00 and passed the station at 22:10. This fish was located upstream of the NC 11 bridge both by the fixed station and by manual tracking on 04/12/04. This fish remained in the near vicinity of the NC 11 fixed station until 04/15/04 when it moved upstream and passed the NC 11 fixed station. This fish dropped back and was registered by the NC 11 fixed station on 04/20/04 and remained within close proximity to the station until 04/30/04. Manual tracking located this fish on 04/26/04 near the NC 11 fixed station but it was not manually found again until 05/24/04 near the NC 11 bridge. This fish remained between NC 11 and L&D #1 and was manually tracked two more times on 06/01/04 and 06/03/04 and is believed to have died at that site.
5286	03/30/2004	Gill Net	Yes	Female shad tagged near L&D #1 fell back and passed the NC 11 fixed station at 14:30 on 03/30/04. This fish returned upstream, passing the station again at 22:30 on 04/01/04. It briefly appeared at the NC 11 fixed station on 04/04/04 but moved back upstream and out of range of the NC 11 monitor. On 04/05/04 at 15:30, this shad was successfully locked upstream of the dam and never found again.
5287	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back and passed the NC 11 station on 03/30/04. This fish moved back upstream, and was found between the NC 11 bridge and the dam in various locations between 04/04/04 and 04/13/04 by both the NC 11 fixed station and manual tracking efforts. At 10:45 on 04/14/04, this fish moved downstream and was located at the IP fixed station at 20:00. This fish promptly turned back upstream and was registered on the NC 11 fixed station at 10:45 on 04/15/04. After this, this fish was not found again.
5288	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 fell back a short distance downstream and is believed to have died. This fish was never located by any fixed station and was manually tracked in the same location seven times.



Appendix E. (concluded)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5289	04/05/2004	Gill Net	No	Female shad tagged near L&D #1 fell back and passed NC 11 station at 02:30 on 04/06/04. Manual tracking located this fish further downstream at a location between IP and NC 11 at 13:30 on the same day. This fish moved back upstream past the NC 11 fixed station on 04/07/04. Manual tracking located shad 5289 near the NC 11 Bridge on 04/08/04. Fixed station data indicate that this fish fell back again to a location between NC 11 and IP on 04/10/04. It moved back upstream and passed the NC 11 fixed station on 04/11/04 and was not located again until 04/18/04 when it was registered by the upstream hydrophone at NC 11. It remained within range for a brief period moved back upstream again. It did this two more times on 04/22/04 and 04/25/04 after which this fish was not found again until 05/11/04. It was located by the IP fixed station at 15:45 moving downstream. After this the fish was not located again.
5290	03/30/2004	Gill Net	No	Female shad tagged near L&D #1 was immediately recaptured downstream from its tagging location in a commercial set net the same day.

<sup>a</sup> "Yes" indicates tag was recorded above Lock and Dam #1 from the fixed monitoring receiver or was manually tracked during additional tracking efforts from Buckhorn Dam to Lock and Dam #1



## **APPENDIX F**

### **SUMMARY OF STRIPED BASS BEHAVIOR FROM FISH TAGGED AND RELEASED IN THE CAPE FEAR AND BRUNSWICK RIVER DURING 2004**



Appendix F. Summary of Striped Bass behavior from fish tagged and released at Lock and Dam #1 during 2004.

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5004	03/14/2002	Gill Net	No	Male tagged in 2002 returned to the study area and was manually tracked seven times between 02/24/04 and 03/25/04 in similar location near the 421 bridge. On 04/09/04 this bass passed the IP fixed station at 8:10 and the NC 11 monitor at 04:30 on 04/10/04. It moved back downstream passing the NC 11 bridge at 19:30 on 04/10/04 and the IP station at 04:00 on 04/11/04. Manual tracking on 04/12/04 found this fish a short distance upstream from the mouth of Indian Creek. It moved upstream again and passed the IP station on 04/15/04 and the NC 11 monitor on 04/16/04. Manual tracking located this bass between the NC 11 bridge and L&D #1 on 04/19/04. It fell back downstream again and passed NC 11 on 04/20/04 and IP on 04/21/04. Manual tracking located this fish near Greenbank Landing on 04/22/04. Once again the fish moved back upstream and passed IP on 04/24/04 and NC 11 on 04/25/04. On 05/10/04, manual tracking located this fish near L&D #1. Later that day it moved downstream again passing the NC 11 station at 19:00 and passed the IP station at 22:20 and is believed to have left the study area. This fish was not found again.
5009	01/30/2003	Gill Net	No	Female tagged in 2003 returned to the study area and was manually tracked in the vicinity of the NC 421 bridge on 03/05/04 and the USS North Carolina on 03/08/04. This fish was not located again until it passed the IP fixed station at 11:30 on 04/26/04. Manual tracking found this fish on 04/26/04 near Narrow Gap or at approximate River Mile 35. This fish approached but did not pass the NC 11 fixed station at 20:00 on the same day. The fish remained between IP and NC 11 until 05/01/04 when it passed the IP monitor and is believed to have left the study area.
5010	01/30/2003	Gill Net	Yes	Female striped bass tagged in 2003 appears to have passed the dam sometime prior to 03/31/04. This fish appears on the L&D #1 fixed monitor several times between 03/31/04 and 04/02/04. It appears at the NC 11 fixed station on 04/06/04 and passes the monitor moving downstream on 04/07/04 at 18:45. It is registered at the IP fixed station at 04:30 on 04/09/04 at an upstream location. This fish disappears until 04/22/04 when it is picked up by the NC 11 monitor. This bass remains in the general vicinity of the NC 11 bridge until 04/25/04 when it moves downstream and is located by the IP station on 05/01/04. It passes the IP station at 20:00 on 05/07/04 and is not located again until 06/15/04 when it is found across from the mouth of Smith Creek on the NE Cape Fear River.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5011	01/30/2003	Gill Net	Yes	Male striped bass tagged in 2003 returned to the study area and passed the IP fixed station at 10:00 on 03/29/04. This fish was manually tracked at 12:45 on the same day a short distance upstream from the IP monitor. Bass 5011 managed to pass the NC 11 fixed station undetected and successfully passed through the lock chamber on 03/31/04 at 10:30. This fish remained within close proximity to the L&D #1 fixed station until 00:30 on 04/03/04 when it appears to have fallen back near the dam. It was picked up by the NC 11 fixed station at 09:30 on the same day and passed the station moving downstream. Manual tracking located bass 5011 on 04/06/04, approximately 2 miles upstream from the boat landing in Riegelwood. The fixed station at NC 11 located this fish briefly on 04/07/04 and manual tracking found this fish downstream near the boat landing on 04/08/04 at 13:00. This fish passed the IP fixed station at 22:00 on 04/08/04. Bass 5011 moved back upstream again passing IP at 22:00 on 04/11/04 and NC 11 at 07:00 on 04/12/04. Fixed station data from L&D #1 indicates that this bass was again successfully passed through the lock at 10:45 on 04/12/04 and remained close to the fixed monitor until 03:30 on 04/13/04 when it fell back over the dam again. Manual tracking on 04/15/04 found this fish back downstream between NC 11 and IP. Bass 5011 was located by the NC 11 fixed station at 10:30 and again during manual tracking at 12:45 near Narrow Gap on 04/22/04. It passed the NC 11 bridge at 03:30 on 04/26/04 and once more passed upstream through the lock chamber on 04/26/04 at 13:45. Bass 5011 moved upstream until 05/25/04 when it was picked up by the L&D #1 fixed station at 19:00. The bass remained in the vicinity of the dam for seven more days until 05/31/04 when it moved back over the dam for a third time. Manual tracking located bass 5011 a short distance below L&D #1 on 06/01/04. The fish passed the NC 11 fixed station on 06/08/04 at 13:00 and IP at 20:45 on the same day. Manual tracking located bass 5011 near the NC 421 bridge on 06/10/04 and 06/15/04.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5012	02/10/2003	Gill Net	Yes	Male striped bass tagged in 2003 returned to the study area in 2004 and was manually located on 02/28/04 at Horseshoe Bend. This bass moved upstream and managed to pass the IP fixed station undetected. The fish passed the NC 11 fixed station on 03/30/04 at 14:30 and was successfully passed upstream through the lock on 03/31/04 at 10:30. The fish fell back over the dam and was manually tracked on 04/01/04 at Caintuck landing near Riegelwood. This bass was successfully passed upstream through the lock again on 04/02/04 at 11:30. Bass 5012 was not found again until 05/27/04 when it passed the L&D #1 fixed station on its way downstream. After 05/27/04 this fish was not located again either manually or by any of the three fixed stations and it is assumed that this bass left the study area.
5014	03/14/2002	Gill Net	No	Male striped bass tagged at Horseshoe Bend in 2002 returned in 2004 was never located during manual tracking efforts but was located by the IP fixed station moving upstream on 04/11/04. It passed the NC 11 monitor on 04/12/04 at 07:00. This bass moved downstream, passing the NC 11 bridge on 04/19/04 at 14:45 and arriving at IP at 09:30 at 04/20/04. This bass moved back upstream again, briefly appearing at the NC 11 station on 04/21/04 at 03:30 when it passed moving upstream. The fish was not located again until 05/11/04 when it passed the NC 11 station moving downstream. Six days later it passed the IP fixed station at 05:30 on 05/17/04 and was not located again for the remainder of the study period.
5015	02/25/2003	Shocked	Yes	Female striped bass returned in 2004 was manually tracked in various locations between Wilmington Harbor and Horseshoe Bend between the dates of 03/08/04 and 04/06/04. On 04/12/04, bass 5015 passed the IP fixed station at midnight and arrived at the NC 11 bridge at 07:00 on the same day. The fish was manually tracked on 04/15/04 a short distance below L&D #1 and again on 04/19/04 upstream from the NC 11 bridge. This fish fell back downstream and passed the NC 11 fixed station at 17:30 on 04/19/04 and the back to the NC 11 bridge at 02:15 on 04/21/04. This fish remained downstream of the NC 11 bridge until 04/29/04 when it was successfully passed through the lock again. This fish was manually located between L&D #2 and L&D #3 on 06/22/04.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5016	02/25/2003	Shocked	No	Female striped bass tagged in 2003 returned in 2004 and was manually tracked on 02/24/04 a short distance downstream from the NC 11 bridge. This fish registered on the NC 11 fixed station later that day at 18:45. Bass 5016 was manually tracked three more times in the same general vicinity between NC 11 and Weyman Creek until 03/10/04. At 16:00 on 03/10/04, this bass passed the NC 11 bridge and was manually tracked on 03/11/04 approximately 300 ft upstream from the bridge. This fish moved downstream again on 03/11/04 and was manually located twice on 03/15/04 and 03/18/04 in the same location a short distance upstream from Weyman Creek. Bass 5016 was located three more times during manual tracking runs on 03/22/04, 03/25/04, and 03/24/04 in the same general vicinity. At 03:30 on 03/31/04, this bass moved back upstream and passed the NC 11 fixed station. On 04/01/04, this fish passed the NC 11 station moving downstream. It was manually tracked later that day at 12:15 at Caintuck Landing. It passed the IP fixed station at 01:00 on 04/02/04. This fish disappeared until 04/19/04 when it passed the IP fixed monitors at 01:00. Bass 5016 passed the NC 11 fixed station at 11:30 on 04/19/04 and was also manually tracked on the same day at a location downstream from L&D #1. On 04/21/04, bass 5016 moved downstream to a location within close proximity of the NC 11 bridge and remained there until 04/28/04 when it moved further downstream. Bass 5016 reached the IP fixed station at 23:30 on 04/28/04 and passed downstream of the monitor for a brief period of time and turned back upstream again arriving at the NC 11 bridge at 18:30 on 04/29/04. This fish remained downstream from the NC 11 bridge, appearing briefly several times on the fixed monitor, until 05/12/04. It passed the NC 11 fixed station at 06:00 and moved to a location a short distance downstream from the dam where it was located later that same day during manual tracking. Bass 5016 moved downstream and passed the NC 11 fixed station on 05/16/04 at 01:00. It was located a short distance downstream from the NC 11 bridge on 05/17/04. It passed the IP fixed station at 13:30 on 05/20/04 and was manually tracked that same day at 13:45 a short distance downstream from the mouth of Livingston Creek. After 05/20/04 this fish was not found again until 06/15/04 when it was located in the Northeast Cape Fear River across from the mouth of Smith Creek.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5018	02/25/2003	Shocked	No	Female striped bass tagged in 2003 returned in 2004 and was manually tracked in the lower river in Wilmington Harbor on 03/11/04. This fish was not found again until 04/05/04 when it was picked up by the NC 11 fixed station at 19:00. This fish remained in the general vicinity of the NC 11 bridge until 04/12/04 when it disappeared and was not located again during the remainder of the study.
5019	02/25/2003	Shocked	No	Female striped bass tagged in 2003 returned in 2004 and was manually tracked six times between 03/11/04 and 04/01/04. This fish was found in the same location each time just downstream from the battleship except for 03/25/04 when it was a short distance downstream from its other location. This fish was never located by any fixed station. On 06/15/04 this fish was located at a position up the Northeast Cape Fear River across from the mouth of Smith Creek.
5020	02/25/2003	Shocked	No	Female striped bass tagged in 2003 returned in 2004. This fish was never located during any of the manual tracking efforts, however, fixed station data located this fish upriver beginning on 03/26/04 when it appeared at the NC 11 bridge. Bass 5020 remained in the general vicinity of the bridge until 03/27/04. It disappeared until 04/20/04 when it was located again at the NC 11 fixed station. It moved downstream and was registered by the IP fixed station on 04/21/04 at 00:15. The fish returned upstream to the NC 11 bridge on 04/23/04 where it remained for a brief period until 04/24/04. Seven days later, this bass moved downstream again and passed the IP station on 05/02/04 at 17:30 promptly turned back upstream passing IP again and arrived at NC 11 at 21:30. This fish disappeared for 12 days and was located by the IP fixed monitor on 05/14/04 moving downstream. This fish was not located again during the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5023	02/25/2003	Shocked	Yes	Male striped bass tagged in 2003 returned in 2004. This fish was manually tracked and located by the NC 11 fixed station in various locations between the dam and the NC 11 bridge between the dates of 02/24/04 and 03/16/04. Bass 5023 fell back downstream and passed the IP fixed station at 06:30 on 03/16/04 and was manually tracked near River Mile 36 on 03/22/04 and 03/25/04. This bass moved downstream further and passed the IP fixed station at 23:00 on 03/28/04. Eight days later this fish moved upstream and passed the IP station at 08:15 on 04/05/04 and the NC 11 monitor at 12:30 on the same day. On 04/06/04, this fish was manually located a short distance downstream of L&D #1. Between 04/06/04 and downstream of L&D #1. Between 04/06/04 and 04/11/04, bass 5023 passed the NC 11 fixed station three times. On 04/12/04, this fish was found in a location near River Mile 36 during manual tracking. On 04/14/04, this fish moved upstream again and passed the NC 11 bridge at 17:30. It was located during manual tracking on 04/15/04 at approximately River Mile 37.5. Bass 5023 fell back again passing the NC 11 monitor on 04/16/04 at 00:30. Three days later, both fixed station data from IP and manual tracking located this fish near Riegelwood on 04/19/04. This fish continued downstream and passed the IP fixed station at 14:45 on 04/19/04. Six days later the fish returned and passed the IP monitor at 13:00 on 04/25/04. Bass 5023 passed the NC 11 station at 17:30 on the same day. At 13:30 on 04/26/04, this fish was successfully locked upstream at L&D #1 and was not located again during the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5024	02/25/2003	Shocked	No	Female striped bass tagged in 2003 returned in 2004. This fish was never located during manual tracking effort but was registered by the NC 11 fixed station on 03/15/04 when it passed moving downstream at 23:00. It remained within range and downstream from the bridge until 05:45 on 03/16/04 when it moved out of range. Bass 5024 was not found again until it briefly registered at the NC 11 bridge on 03/26/04. This fish appeared on the IP fixed station two days later on 03/28/04 for a short period of time as it passed moving downstream. Eight days later it moved back upstream and quickly passed the IP station on 04/05/04. This fish was not located again for nine days when it was picked up by the NC 11 monitor on 04/14/04. This bass remained downstream from the NC 11 bridge and would briefly move into range of the station over the next three days until 01:30 on 04/19/04 when it passed the NC 11 bridge moving upstream. Bass 5024 fell back and passed the NC 11 fixed station at 22:30 on 04/19/04 and was not located again until 05/10/04 when it was registered by the IP fixed station moving downstream at 04:00. This fish was not located again for the remainder of the study.
5026	02/26/2003	Shocked	Yes	Male striped bass tagged in 2003 returned in 2004 passed the fixed station at IP on 04/05/04 at 18:00. It passed the fixed station at the NC 11 bridge on 04/06/04 at 10:30. Bass 5026 moved back downstream and passed the NC 11 monitor again at 23:30 on 04/06/04. Manual tracking located this bass on 04/08/04 at approximately river mile 33. This fish was picked up by the NC 11 monitor on 04/12/04 as it passed the station moving upstream. Later that same day, it was manually tracked a short distance downstream from the dam. On 04/14/04, bass 5026 was again manually tracked between the dam and the NC 11 bridge. On 04/16/04, this bass moved downstream and passed the NC 11 bridge at 00:30. It arrived at the IP fixed station at 03:45 on 04/06/04 and remained there until 21:45 on 04/17/04 when it moved back upstream again. Bass 5026 arrived at the NC 11 station at 12:30 on 04/18/04 and remained near the NC 11 bridge until 04/22/04 when it moved upstream at 03:00. This fish was successfully passed through the lock on 04/23/04 at 08:00. Twelve days later this fish was located by the NC 11 monitor on 05/04/04 at 00:30, moving downstream. It passed the IP station on 05/10/04 at 04:45 and was not located again until 06/15/04 when it was manually tracked at Pt Peter.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5029	02/26/2003	Shocked	No	Female striped bass tagged in 2002 returned in 2004. This fish was manually tracked near Horseshoe Bend on 04/06/04 and 04/08/04. This fish was not found again until 26 days later on 05/04/04 near the NC 421 bridge. This fish again disappeared for 41 days and was manually tracked up the Northeast Cape Fear River across from the mouth of Smith Creek.
5118	03/18/2003	Shocked	Yes	Female hybrid striped bass tagged in 2003 returned in 2004. This hybrid was manually tracked seven times between 02/28/04 and 03/29/04 in various locations between Wilmington Harbor and the north end of the Brunswick River where it meets the Cape Fear River. This fish passed the IP fixed station undetected sometime between 03/29/04 and 03/30/04. The NC 11 fixed station registered this fish on 03/30/04 at 12:00. It remained in the general vicinity of the NC 11 bridge until 07:00 on 04/01/04 when it moved downstream to a location at approximately river mile 33 where it was manually tracked on 04/01/04 in the afternoon. Bass 5118 moved back upstream and passed the NC 11 fixed station on 04/02/04 at 13:30. On 04/04/04 this fish successfully passed upstream through the lock. It remained near the L&D #1 fixed station until 08:30 on 04/06/04 when it moved upstream and was not located again. This fish was recaptured on 04/28/04 below L&D #3 by a recreational fisherman.
5122	02/13/2004	Shocked	No	Male striped bass tagged at Pt. Peter was not located until 29 days later when it was manually tracked on 03/14/04 near the battleship. Bass 5122 was not found again until 05/24/04 underneath the NC 74-76 bridge. This fish was manually tracked 5 more times in the general vicinity of the bridge until the end of the study period on 06/14/04.
5123	02/13/2004	Shocked	No	Female striped bass tagged at Pt. Peter was registered by the NC 11 fixed station on 04/22/04 at 20:45. The fish fell back and was picked up by the IP monitor days later on 05/02/04. This fish moved downstream from IP and was not found again until 27 days later on 05/29/04 when it returned upstream and passed IP at 15:00. The fish passed the NC 11 fixed station at 03:00 on 05/30/04. This fish was recaptured at L&D #1 on 05/31/04 by a recreational fisherman.



Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5124	02/13/2004	Shocked	Yes	Male striped bass tagged at Pt. Peter was not located again until 44 days later when it was manually tracked at Pt. Peter on 03/29/04. Nine days later, bass 5124 was manually tracked at approximately river mile 20 on 04/08/04. This fish passed the IP fixed station at 23:45 on the same day. It passed the NC 11 fixed station at 07:00 on 04/09/04. On 04/12/04, manual tracking found bass 5124 a short distance downstream from L&D #1. This fish was successfully passed through the lock and was later found below Buckhorn Dam, approximately 126 miles upstream from L&D #1, on 06/22/04.
5125	02/13/2004	Shocked	No	Female striped bass tagged at Pt. Peter was manually tracked 15 days after it was tagged near Horseshoe Bend on 02/28/04. This fish was not manually located again but fixed station data located this fish 41 days later passing the IP fixed station at 15:15 on 04/10/04. This fish passed the NC 11 fixed monitor later that same day at 19:00. After this, the fish was not located again for the remainder of the study.
5126	02/13/2004	Shocked	No	Female striped bass tagged at Pt. Peter was not located for 30 days after tagging. On 03/15/04 and 03/25/04, this fish was manually tracked amongst the old dock piling between the battleship and the NC 421 bridge. 23 days later, this fish was picked up by the IP fixed monitor at 21:30 on 04/16/04 when it passed moving upstream. Three days later on 04/19/04, bass 5126 was manually tracked at approximately river mile 36 downstream from the NC 11 bridge. This fish moved upstream and was registered by the NC 11 monitor on 04/20/04 and it remained within close proximity of the NC 11 bridge until 04/25/04. Two days later on 04/27/04, this bass was located by the IP fixed station moving downstream. Bass 5126 passed the station at IP at 08:15 on 04/27/04 and disappeared until 01:00 on 05/01/04 when it returned to IP and remained downstream from the station until 20:45. 16 days later on 05/17/04, this fish was manually tracked back at Pt. Peter and again on 05/20/04 in the same location. This fish disappeared for 25 days until 06/15/04 when it was once again tracked at Pt. Peter
5127	02/13/2004	Shocked	No	Male striped bass tagged in Horseshoe Bend was manually tracked 13 times between 02/24/04 and 04/15/04 at various locations between Horseshoe Bend and Wilmington Harbor. After 04/15/04, this fish disappeared for 61 days until 06/16/04 when it was manually tracked near the southern end of the Brunswick River where it joins the Cape Fear River.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5128	02/13/2004	Shocked	No	Female striped bass tagged at Pt. Peter was not located until 04/26/04, after which this fish was manually tracked 7 more times at various locations between the NC 74-76 bridge and Pt. Peter. After 05/27/04, this fish was not tracked again for the remainder for the study.
5129	02/13/2004	Shocked	Yes	Male striped bass tagged at Pt. Peter was manually tracked on 03/29/04 a short distance upstream from the NC 421 bridge. This fish moved rapidly upstream passing the IP fixed station on 03/30/04 and the NC 11 fixed station on 03/31/04. This fish successfully passed through the lock at 10:30 on the same day. It only stayed above the dam for a short period of time and fell back over the dam and rapidly moved downstream passing the NC 11 and IP stations in the early morning of 04/01/04. This fish was manually tracked at 09:15 on 04/01/04 back at the NC 421 bridge. This fish remained in the general vicinity of the NC 421 bridge and was tracked on four more occasions until 04/15/04. Bass 5129 moved back upstream and passed the IP fixed station undetected and arrived at the NC 11 fixed station at 02:30 on 04/23/04. This fish remained near the NC 11 bridge until 04/26/04 when it moved downstream and passed the IP monitor on 04/24/04. This fish was not located again until 37 days later when it was manually tracked at Pt. Peter. This bass was located three more times during manual tracking efforts at Pt. Peter until 06/15/04.
5130	02/13/2004	Shocked	No	Male striped bass tagged at Pt. Peter was manually tracked 22 times between 02/24/04 and 06/15/04. All locations were in the vicinity of the NC 421 bridge and Pt. Peter except for 02/28/04 when it was found near Horseshoe Bend. This fish was never located upstream during the course of the study.
5201	02/16/2004	Shocked	Yes	Male striped bass tagged in Alligator Creek was manually located on 03/24/04 passing the NC 11 fixed station at 00:30. This fish was manually located on 03/25/04 a short distance downstream from the dam and fell back to the vicinity of the NC 11 bridge on 03/26/04. It remained near the bridge until 06:45 on 03/27/04 when it moved back upstream and passed through the lock on 03/29/04 at 11:00. 22 days later this fish was recaptured at Buckhorn Dam, 126 miles upstream from L&D #1.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5202	02/16/2004	Shocked	Yes	Female striped bass tagged near Horseshoe Bend was manually tracked on 03/11/04 between Horseshoe Bend and the NC 421 bridge. 25 days later this fish was located by the IP fixed station at 17:00 on 04/05/04 as it passed on its way upstream. Bass 5202 passed the NC 11 fixed station on 04/06/04 at 10:30. This fish was not found again until 6 days later on 04/12/04 when it moved downstream and passed the NC 11 bridge at 11:30. This fish was picked up by the IP fixed station at 21:00 on the same day. This bass disappeared until seven days later when it passed the IP station on 04/19/04 at 10:20 moving upstream. Manual tracking located this fish on the same day approximately two miles upstream from the Riegelwood boat landing. Bass 5202 arrived at the NC 11 fixed station at 21:00 on 04/19/04. This fish remained near the NC 11 bridge until 04/22/04 when it moved upstream. This fish was not located again until it was registered on the Lock and Dam fixed station passing through the lock on 05/03/04 at 09:00. This bass did not remain above the dam for very long and fell back downstream and was picked up by the NC 11 station at 01:00 and again at the IP station at 03:00 on the same day. This fish disappeared for 35 days until 06/15/04 when it was manually tracked up the Northeast Cape Fear River across from Smith Creek.
5203	02/16/2004	Shocked	Yes	Female striped bass tagged in Alligator Creek was manually tracked on 03/03/04 a short distance upstream from Indian Creek. This fish fell back to a location near the train trestle at Navassa where it was found on 03/29/04. On 04/06/04 and 04/08/04 this fish was manually tracked near Horseshoe Bend. This bass moved upstream to a location upstream from Indian Creek again where it was manually tracked on 04/12/04. On 04/19/04, this bass was found upstream at Hood Creek. Bass 5203 passed the IP fixed station at 00:00 on 04/20/04. It passed the NC 11 monitor at 11:00 on 04/20/04. It was manually tracked on 04/22/04 near the mouth of Natmore Creek between the NC 11 bridge and L&D #1. Bass 5203 remained at this location until 04/30/04 when it fell downstream and passed the NC 11 fixed station at 23:30. Three days later this fish passed the IP station, heading downstream on 05/03/04 at 07:00. Seven days later it returned upstream and was registered by the IP fixed station on 05/10/04 at 09:00. Bass 5203 remained in various locations downstream of the IP monitor and was manually tracked 8 more times until 06/14/04. This fish passed L&D #1 between 06/15/04 and 06/29/04 and was recaptured at L&D #2 by a recreational fisherman.



Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5204	02/16/2004	Shocked	Yes	Male striped bass tagged in Alligator Creek was tracked on 04/22/04 passing the IP fixed station at 11:45 and manual tracking located this fish at 12:00 just upstream of the IP station on the same day. The fish passed the NC 11 fixed station on 04/23/04 at 07:30. Three days later, this bass was successfully passed through the lock on 04/26/04 at 13:45. This fish disappeared until it returned to the vicinity of the L&D #1 monitor on 06/05/04. Bass 5204 remained within close proximity of the L&D #1 station until 06/07/04, after which this fish was not located again during the remainder of the study.
5205	02/16/2004	Shocked	No	Female striped bass tagged in Alligator Creek was located by the NC 11 fixed station on 04/05/04 at 12:30 as it passed moving upstream. Manual tracking located bass 5205 a short distance downstream from L&D #1 on 04/06/04. This fish fell back downstream and passed both fixed monitor, undetected, and was manually tracked on 04/15/04 a short distance downstream from the Progress Energy Power Plant (CP&L). After this the fish was not located again during the remainder of the study.
5206	02/18/2004	Shocked	Yes	Female striped bass tagged at the NC 74-76 bridge where it passes over Alligator and Redmond Creeks, passed both fixed stations at IP and NC 11 bridge undetected and was successfully passed through the lock as indicated by the L&D #1 station on 03/31/04 at 15:30. This fish remained within close proximity to the L&D #1 monitor until 04/02/04 when it moved out of range of the station. This fish was not located again until 05/04/04 when it was manually tracked a short distance downstream from the Progress Energy Power Plant (CP&L). This fish was manually tracked seven more times between 05/06/04 and 06/14/04, each time in the same location as before just downstream from CP&L. It is believed that this fish died at this location.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5207	02/18/2004	Shocked	No	Female striped bass tagged at the NC 74-76 bridge where it crosses Alligator and Redmond Creeks was not located until 55 days later when it was picked up by the IP fixed monitor as it passed moving upstream on 04/13/04. This fish passed the NC 11 fixed station at 18:30 on 04/13/04. On 04/20/04, bass 5207 fell back downstream and passed both fixed stations at NC 11 and IP and was later manually located on 04/22/04 near the NC 421 bridge. Twenty days later on 05/10/04 this fish was manually tracked near the Castle Street boat landing. This fish remained in the general vicinity of Wilmington Harbor until 05/17/04 when it was located by the IP fixed station and the NC 11 fixed station moving rapidly upstream. Bass 5207 fell back downstream again, passing the NC 11 bridge at 16:15 on 05/19/04. Both manual tracking and fixed station data locates this fish a short distance upstream from the Riegelwood Boat Landing until 05/28/04. This bass moved back upstream and passed the NC 11 fixed station at 12:45 on 04/28/04, after which this fish was not located again for the remainder of the study.
5208	02/16/2004	Shocked	No	Male striped bass tagged in Alligator Creek was manually tracked ten times between 02/24/04 and 04/22/04 at various locations between Wilmington Harbor and Navassa. After 04/22/04 this fish disappeared until 05/10/04 when it was located by the IP fixed station as it passed moving upstream at 12:00. This fish reached the NC 11 bridge, but did not pass on 05/11/04. Bass 5208 remained between the NC 11 bridge and IP until 05/17/04 when it fell back downriver passing the IP monitor at 05:30. This fish was manually tracked four more times near the Castle Street landing until 06/01/04, after which, this fish was not located again during the remainder of the study.
5209	02/16/2004	Shocked	No	Male striped bass tagged near Horseshoe Bend was manually tracked seven times between 02/24/04 and 04/01/04 at various locations between the NC 421 bridge and Navassa. This fish moved upstream and passed the IP fixed station on 04/06/04 at 08:30. Bass 5209 reached the NC 11 bridge at 11:30 on the same day and remained in the general vicinity of the bridge until 04/08/04 when it moved back downstream and passed the IP station on 04/09/04 and was not located again for the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5210	02/16/2004	Shocked	Yes	Male striped bass tagged in Alligator Creek was not located until 20 days later on 03/08/04 when it was manually tracked near the NC 421 bridge. This fish moved upstream and passed the IP fixed station undetected between 03/08/04 and 03/14/04. On 03/14/04, bass 5210 passed the NC 11 fixed station at 10:00 moving upstream. Manual tracking located this fish four times between 03/18/04 and 04/08/04 between the NC 11 bridge and L&D #1. This fish was picked up by the NC 11 fixed station briefly on 04/22/04 and 04/24/04. Bass 5210 moved back upstream towards the dam and successfully passed upstream of the dam. This fish was later manually tracked near L&D #3 on 06/22/04. Bass 5210 was recaptured on 07/22/04 by a recreational fisherman at the base of L&D #3.
5211	02/18/2004	Shocked	No	Female striped bass tagged at the Castle Street landing was not located until 39 days later when on 03/29/04 it was manually tracked among the old dock piling downstream from the NC 421 bridge. This fish disappeared again until 22 days later when it was registered by the NC 11 fixed station on 04/20/04 moving upstream. Bass 5211 remained near the NC 11 bridge until 23:30 on 04/21/04 when it fell back downstream to a location near Narrow Gap where it was manually located on 04/22/04. This fish passed the IP fixed station five days later on 04/27/04 moving downstream and was not located again during the remainder of the study.
5212	02/16/2004	Shocked	Yes	Female striped bass tagged in Alligator Creek was manually tracked only once on 04/19/04 between the Black River and Strawberry Hill landing. This fish passed the IP station at midnight on 04/20/04 and remained near IP until 04/26/04 when it moved downstream. Bass 5212 returned upstream again and passed the IP fixed station at 19:00 on 05/02/04. Three hours later at 22:00 it passed the NC 11 fixed station. On 05/03/04 at 11:00 this fish was successfully passed through the lock chamber. This fish was not located again until 05/28/04 when it briefly appeared at the L&D #1 station again. Bass 5212 moved back upstream until 06/06/04 when it once again was located by the L&D #1 fixed monitor at 02:45. After this the fish was not located again during the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5213	02/20/2004	Shocked	Yes	Female striped bass tagged in the Cape Fear River between Horseshoe Bend and the train trestle at Navassa was manually tracked on 02/24/04 and 03/03/04 in the vicinity of Horseshoe Bend. This fish was manually tracked on 03/11/04 at approximately river mile 35. At 09:00 on 03/12/04 this fish passed the NC 11 fixed station. This fish fell back by the NC 11 bridge on 03/14/04 and was manually tracked at river mile 36 on 03/15/04. Bass 5213 was once again manually located at mile 36 on 03/18/04. This fish remained near this location until 03/21/04 when it moved upstream and passed the NC 11 bridge. This bass was successfully passed through the lock on 03/25/04. This fish disappeared until 04/09/04 when it fell back over the dam at 01:30. It passed the NC 11 bridge at 09:30 and IP at 11:30 on the same day. Ten days later bass 5213 was manually tracked downstream at river mile 5 on 04/19/04. It moved upstream again and was manually located a short distance downstream from Lyon Thoroughfare on 04/22/04. This fish passed the IP fixed station at 11:30 on 04/23/04 and was successfully passed through the lock again on 04/26/04 at 14:00. 58 days later this fish was manually tracked a short distance downstream from L&D #2 on 06/23/04, 70.5 miles upstream from Wilmington.
5214	02/16/2004	Shocked	Yes	Male striped bass tagged in Alligator Creek was manually tracked near river mile 11 on 04/01/04. It passed the IP fixed station at 05:45 on 04/02/04 and the NC 11 fixed station at 16:30 on the same day. This bass made several trips back and forth between IP and the NC 11 bridge between 04/03/04 and 04/12/04. Bass 5214 was manually tracked a short distance downstream from L&D #1 on 04/12/04. It remained between the dam and the NC 11 bridge, briefly making appearances on the NC 11 fixed monitor until 04/26/04 when it was successfully passed through the lock upstream. 58 days later on 06/23/04 it was manually tracked near river mile 69, a short distance downstream from L&D #2.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5215	02/20/2004	Shocked	Yes	Female striped bass tagged in Toomers Creek was manually tracked eight times between 02/24/04 and 04/08/04 at various locations between the Navassa train trestle and Wilmington Harbor. On 04/11/04 this fish passed the IP fixed station at 09:00 moving upstream. It passed the NC 11 fixed station on the same day at 14:15. Seventeen days later on 04/28/04, this fish was successfully passed through the lock at 08:30. Bass 5215 was not located again until 05/09/04 when it fell back over the dam and passed the NC 11 monitor on 05/10/04 at 02:30 and the IP station at 04:45 on the same day. This fish returned to the vicinity of the IP station briefly on 05/22/04 and 05/23/04. It was manually tracked near river mile 5 on 05/24/04. 15 days later on 06/10/04 it was manually tracked at Pt. Peter, after which it was not located again for the remainder of the study.
5216	03/02/2004	Shocked	Yes	Female striped bass tagged at Horseshoe Bend was tracked 14 times between 03/11/04 and 06/01/04 at various locations between Horseshoe Bend and Wilmington Harbor. On 06/02/04, this fish passed the IP fixed station at 17:15 and the NC 11 fixed station at 11:30 on 06/03/04. Bass 5216 was successfully passed through the lock on 06/03/04 at 17:30. It remained near the L&D #1 fixed station until 06/06/04 when it fell back over the dam and as manually tracked near the mouth of Natmore Creek on 06/07/04. This fish successfully navigated the lock again on 06/08/04 at 15:00 and was not located again for the remainder of the study.
5217	02/16/2004	Shocked	No	Female striped bass tagged in Alligator Creek was manually located on 03/03/04 at Horseshoe Bend. 58 days later, this fish was tracked near river mile 14 on 04/12/04. Bass 5217 passed the IP fixed station at 20:30 on 04/12/04 and the NC 11 fixed station at 09:15 on 04/13/04. Twelve days later on 04/25/04 bass 5217 fell back downstream and passed both fixed station. This fish was not located again until 06/15/04 when it was manually tracked at Pt. Peter.
5218	02/16/2004	Shocked	No	Female striped bass tagged in Alligator Creek was located by the NC 11 fixed station on 04/06/04 as it passed moving upstream. It was manually tracked later that same day a short distance downstream from L&D #1. This fish was not found again until it passed the IP fixed station on 05/15/04 at 14:30. This fish disappeared again until 06/10/04 when it was manually tracked at Pt. Peter. After this date, the fish was not located again for the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5219	02/16/2004	Shocked	Yes	Striped bass tagged at Horseshoe Bend was manually tracked seven times between 02/24/04 and 03/15/04 at four locations between the NC 421 bridge and Horseshoe Bend. Bass 5219 moved upstream and passed the IP fixed station at 10:00 on 04/05/04 and the NC 11 fixed station at 13:30 on the same day. Three days later, this fish was manually tracked a short distance downstream from L&D #1 on 04/08/04. Eleven days later, on 04/19/04, bass 5219 successfully passed through the lock at 15:00. This fish was not found again until it was recapture by a recreational fisherman on 07/22/04 at L&D #3, 95 miles upstream from Wilmington.
5220	02/18/2004	Shocked	No	Male striped bass tagged at the NC 74-76 bridge where it crosses Alligator and Redmond Creeks was located by IP fixed station as it passed at 20:30 on 04/12/04. It passed the NC 11 fixed station at 06:00 on 04/13/04. Manual tracking located this a short distance downstream from L&D #1 on 04/15/04. Bass 5220 fell back passed the NC 11 bridge on 04/16/04 and was manually tracked on 04/19/04 at Narrow Gap. This bass moved back upstream and was located by both manual tracking and the NC 11 fixed station on 04/22/04. The fish remained in the vicinity of the NC 11 bridge until 04/26/04 when it fell back downstream and was picked up by the IP fixed station as it passed on 04/27/04 at 11:00. On 04/29/04, bass 5220 was manually tracked near Dollison's Landing or approximately 135 miles upstream from Wilmington. This fish was not located again until 05/24/04 when it was manually tracked near the NC 421 bridge. It remained in the vicinity of the NC 421 bridge for the remainder of the study.
5221	03/02/2004	Shocked	No	Male striped bass tagged in Alligator Creek was manually tracked on 03/25/04 near Horseshoe Bend. On 03/29/04 this fish was found underneath the NC 421 bridge. After this, bass 5221 was not located again until 06/15/04 when it was found up the Northeast Cape Fear River across from the mouth of Smith Creek.
5222	02/18/2004	Shocked	No	Female striped bass tagged at the NC 74-76 bridge where it crosses Alligator and Redmond Creeks was manually tracked near the NC 521 bridge among some old dock pilings on 02/28/04. This fish was not found again until 05/13/04 when it was manually tracked between Horseshoe Bend and Toomer's Creek. This fish disappeared again for 30 days and was located on 06/14/04 in Wilmington Harbor.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5223	02/20/2004	Shocked	Yes	Female striped bass tagged in the Cape Fear River between Horseshoe Bend and Toomer's Creek passed both the IP and NC 11 fixed stations undetected and was manually tracked on 03/22/04 halfway between the NC 11 bridge and L&D #1. On 03/25/04 this fish was successfully passed through the lock and moved upstream. The fish was not found again until 05/23/04 when it was picked up by the L&D #1 fixed station. Bass 5223 remained near the L&D #1 station until 05/26/04 when it fell back over the dam around 03:15. It rapidly moved downstream, passing the NC 11 bridge at 07:30 and IP at 11:30 on the same day. On 05/27/04 bass 5223 was manually tracked at the Coast Guard Station in Wilmington Harbor. After this, the fish was not located again for the remainder of the study.
5224	02/18/2004	Shocked	No	Female striped bass tagged at the Castle Street Landing was manually tracked eight times between 02/24/04 and 03/25/04 at very similar locations in Wilmington Harbor. This fish was located on 04/03/04 as it passed the NC 11 fixed station at 08:00. Manual tracking found this fish near L&D #1 on 04/08/04. This fish fell back downstream and was registered by the IP fixed station on 04/11/04 at 18:30. This bass disappeared until nine days later when it was picked up by the NC 11 monitor on 04/20/04. Two days later it was manually tracked back downstream in Wilmington Harbor on 04/22/04. Bass 5224 was manually tracked 11 more times in various locations around Wilmington until 06/14/04. After this the fish was not located again.
5225	02/18/2004	Shocked	No	Male striped bass tagged in Alligator Creek was not located after tagging for the remainder of the study.
5226	02/18/2004	Shocked	Yes	Male striped bass tagged at the NC 74-76 bridge where it crosses Alligator and Redmond Creeks was manually located on 04/06/04 near river mile 10. This fish passed the IP fixed station at 00:30 on 04/08/04 and the NC 11 fixed station at 07:00 on the same day. Twenty days later, this fish was successfully passed through the lock. This fish was not located again until 06/03/04 when it returned to the vicinity of the L&D #1 station where it remained until 07:00 on 06/09/04. This fish fell back downstream and passed the NC 11 monitor at 10:00 and the IP station at 13:00 on the same day. The following day, this fish was manually tracked at Horseshoe Bend on 06/10/04. After this, bass 5226 was not found again for the remainder of the study.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5227	03/02/2004	Shocked	Yes	Female striped bass tagged in Alligator Creek was located by the IP fixed station as it passed moving upstream on 04/25/04 at 19:00. This fish passed the NC 11 fixed monitor at 06:45 on 04/26/04. Bass 5227 fell back downstream and passed the NC 11 bridge on 04/28/04 at 09:30. The following day, 04/29/04, this fish was manually tracked between the NC 11 and IP. On 04/30/04, bass 5227 passed the IP station still moving downstream. Three days later on 05/02/04, this bass returned upstream passing both the IP fixed station and the NC 11 station on 05/02/04. On 05/03/04, bass 5227 was successfully passed through the lock. This fish was later recaptured at L&D #2 by a recreational fisherman.
5228	02/20/2004	Shocked	No	Female striped bass tagged in the Cape Fear River near Horseshoe Bend was not located again after tagging.
5229	02/18/2004	Shocked	No	Male striped bass tagged at the Castle Street Boat landing was manually tracked twice, once on 03/03/04 and again on 03/08/04, at locations between Toomer's Creek and Horseshoe Bend. The IP fixed station located this fish 48 days later on 04/20/04 as it passed moving upstream. Later that same day, bass 5229 arrived at the NC 11 fixed station and remained at a location a short distance downstream until 04/28/04 when it moves further downstream and out of range. 17 days later this fish was picked up by the IP fixed station on 05/15/04 and remained in the vicinity of the station where it was manually tracked and registered by the station until 05/24/04 when it moved upstream again. Bass 5229 briefly appeared on the NC 11 fixed station at 04:45 on 05/25/04. I fell back downstream again and passed the IP monitor on 05/27/04 at 05:45. This fish was not found again for the remainder of the study.
5230	02/20/2004	Shocked	Yes	Male striped bass tagged in the Cape Fear River a short distance upstream from Horseshoe Bend was manually tracked on 02/24/04 and 02/28/04 at the same location between Horseshoe Bend and the NC 421 bridge. This fish was not located again until 37 days later when it was manually tracked underneath the NC 421 bridge on 04/06/04. Bass 5230 moved rapidly upstream and passed the IP fixed station at 01:00 on 04/08/04 and the NC 11 fixed station at 07:30 on the same day. On 04/09/04, this fish was successfully passed through the lock at 10:30. This fish was not found again until 06/22/04 when it was manually tracked at L&D #2.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5231	02/20/2004	Shocked	Yes	Female striped bass tagged in Toomer's Creek was manually tracked seven times at various locations between Toomer's Creek and Pt. Peter until 04/01/04. This fish passed the IP fixed station on 04/07/04 at 18:15 and the NC 11 fixed station at 01:15 on 04/08/04. Bass 5231 fell back downstream passing the NC 11 station on 04/09/04 at 03:45 and arriving at the IP fixed station at 09:00 on the same day. The fish remained near the IP monitor until 18:45 on 04/11/04 when it moved back upstream and passed the NC 11 bridge at 01:45 on 04/12/04. This fish was manually tracked on 04/12/04 and 04/15/04 between the NC 11 bridge and L&D #1. On 04/19/04 bass 5231 was successfully passed through the lock at 08:15. This fish was later recaptured at Buckhorn Dam by a recreational fisherman.
5232	03/02/04	Shocked	Yes	Female striped bass tagged in Alligator Creek was manually tracked on 03/11/04 upstream from Horseshoe Bend. On 04/08/04 this fish passed the NC 11 station at 06:45. This fish disappeared until 04/28/04 when it was picked up by the NC 11 station for a brief period. This fish disappeared again until 05/15/04 when it was successfully passed through the lock. This fish disappeared again until 06/04/04 when it was located by the L&D #1 fixed station. Bass 5232 remained near the L&D #1 monitor until 06/08/04 when it disappeared again and was not found again for the remainder of the study.
5233	03/02/2004	Shocked	No	Male striped bass tagged at Horseshoe Bend was manually tracked three times on 03/03/04, 03/05/04, and 03/18/04 in the vicinity of where it was tagged. This fish was not located again until 05/20/04 when it was manually tracked very near the three previous manual tracking locations. Twenty-five days later on 06/14/04, this fish was found near Greenbank Landing.
5234	03/02/2004	Shocked	No	Female striped bass tagged at Horseshoe Bend was tracked seven times between Horseshoe Bend and Pt. Peter until 04/15/04. This fish was not located again until 06/15/04 when it was manually tracked in the Northeast Cape Fear River approximately 700 feet upstream of the train trestle.



## Appendix F. (continued)

Tag #	Tagging Date	Collection method	Passed upstream <sup>a</sup>	Comments
5235	03/02/2004	Shocked	Yes	Male striped bass tagged in Alligator Creek was manually tracked near the Lyon Thoroughfare on 04/19/04. This fish passed the IP fixed station at 19:00 on the same day. The following day, 04/20/04, this bass was picked up by the NC 11 fixed station at location downstream from the bridge. This fish was manually tracked at this same location on 04/22/04 and a short distance upstream on 04/26/04. On 04/28/04, bass 5235 passed the NC 11 monitor moving upstream at 08:00. On 04/30/04, this fish was successfully passed through the lock at 09:15. Twenty-five days later, bass 5235 returned to the vicinity of the L&D #1 station on 05/24/04 and remained within close proximity to the dam until 01:00 on 05/25/04 when it fell back downstream. This fish passed the NC 11 fixed station on 05/25/04 at 05:00 and arrived at the IP station at 08:45 on the same day. This bass remained within the vicinity of the IP fixed station until 05:30 on 05/27/04 when it departed back upstream. It was manually tracked a short distance downstream from the NC 11 bridge later that same day. Bass 5235 passed the NC 11 fixed station at 17:30 on 05/27/04 and was not found again for the duration for the study.
5236	03/02/2004	Shocked	No	Female striped bass tagged in Alligator Creek was never tracked either manually or by any fixed station after it was tagged.
5237	03/02/2004	Shocked	Yes	Male striped bass tagged at Horseshoe Bend was manually tracked on four occasions between Toomer's Creek and Pt. Peter until 03/29/04. On 04/06/04, this fish was manually located approximately six miles upriver near Progress Energy (CP&L). This fish fell back downstream and was tracked on 04/08/04 back at Horseshoe Bend. On 04/12/04, bass 5237 passed the IP fixed station at 11:30 and was manually tracked at Caintuck Landing a short time after on the same day. It passed the NC 11 fixed station at 05:45 on 04/13/04 and was successfully passed through the lock later that same day. This fish was found 70 days later approximately five miles downstream from Buckhorn Dam, or approximately 120 miles upstream from L&D #1, on 06/22/04. Bass 5237 was later recaptured on 07/07/04 by a recreational fisherman at the I-95 bridge in Fayetteville, NC.
5238	03/02/2004	Shocked	No	Male striped bass tagged at Horseshoe Bend was manually tracked at the mouth of Toomer's Creek on 03/03/04. This fish was not found again until 06/16/04 when it was located between the NC 74-76 bridge and the south end of the Brunswick River.



Appendix F. (concluded)

Tag #	Tagging Date	Collection method	Passed upstream <sup>1</sup>	Comments
5239	02/20/2004	Shocked	No	Male striped bass tagged in the Cape Fear River between Toomer's Creek and Horseshoe Bend was not located until 35 days after tagging when it was found at the NC 421 bridge on 03/25/04. This fish was not located again for the remainder of the study.
5240	03/20/2004	Shocked	No	Female striped bass tagged in the Cape Fear River between Toomer's Creek and Horseshoe Bend was manually tracked on 03/03/04 and 03/11/04 at Horseshoe Bend. On 04/01/04, it was located among the old dock pilings near the NC 421 bridge. Bass 5240 moved upstream and passed the IP fixed station at 21:45 on 04/11/04. It passed the NC 11 monitor at 09:45 on the following day. This fish was manually tracked a short distance downstream from L&D #1 on the afternoon of 04/12/04. Bass 5240 fell back downstream, passing the NC 11 bridge at 19:00 on 04/12/04. It made two more roundtrips between the NC 11 bridge and IP until 04/15/04 when it moved downstream, passing the IP fixed station at 10:30. This fish was manually located later that same day near Greenbank Landing. This fish was not located again until 06/03/04 when it was found near Greenbank Landing once again. This fish was manually tracked in the Northeast Cape Fear River on 06/15/04.

<sup>a</sup> "Yes" indicates tag was recorded above Lock and Dam #1 from the fixed monitoring receiver or was manually tracked during additional tracking efforts from Buckhorn Dam to Lock and Dam #1